

chain nodes :

19 20 21 22 23 24 25 26 27 28 29 30

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

5-19 6-22 8-20 10-25 11-26 12-27 14-23 16-30 17-29 18-28 19-20 20-21
22-23 23-24

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-19 6-22 7-8 7-12 8-9 8-20 9-10 10-11 10-25
11-12 11-26 12-27 13-14 13-18 14-15 14-23 15-16 16-17 16-30 17-18 17-29
18-28 19-20 20-21 22-23 23-24

Match level :

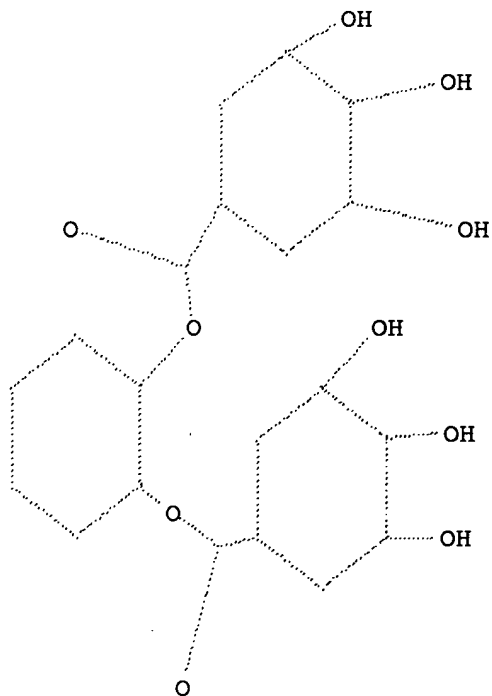
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 12:59:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 41422 TO ITERATE

100.0% PROCESSED 41422 ITERATIONS

70 ANSWERS

SEARCH TIME: 00.00.01

L2 70 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 12:59:52 ON 09 FEB 2007

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE LAST UPDATED: 8 Feb 2007 (20070208/ED)

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<http://www.cas.org/infopolicy.html>

=> s 12

L3 70 L2

=> d ibib ed abs hitstr tot

L3 ANSWER 1 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:65609 CAPLUS

TITLE: Antiplasmodial activity of compounds from *Sloanea rhodantha* (Baker) Capuron var. *rhodantha* from the Madagascar rain forest

AUTHOR(S): Cao, Shugeng; Ranarivelo, Lalaso; Ratsimbason, Michel; Randrianasolo, Sennen; Ratovoson, Fidy; Andrianjafy, Mamisoa; Kingston, David G. I.
 CORPORATE SOURCE: Department of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA
 SOURCE: *Planta Medica* (2006), 72(15), 1438-1440
 CODEN: PLIMEA; ISSN: 0032-0943
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 21 Jan 2007
 AB Bioassay-directed separation of the butanol-soluble portion of an extract of *Sloanea*

rhodantha (Baker) Capuron var. *rhodantha* (Elaeocarpaceae) active against the drug-sensitive HB3 strain of *Plasmodium falciparum* led to the isolation of 7 phenolic compounds, gallic acid (1), 3,5-di-O-galloylquinic acid (2), 1,6-di-O-galloyl glucopyranoside (3), 3,4,5-tri-O-galloylquinic acid (4), 1-O-eudesmoylquinic acid (5), 1,2,3,6-tetra-O-galloyl glucopyranoside (6), and 3,4,5-trimethoxyphenyl-(6'-O-galloyl)-O- β -D-glucopyranoside (7). The structure of the new compound 5 was established on the basis of interpretation of its 1D and 2D NMR spectroscopic data. Compds. 2, 3, 4, 6, and 7 showed weak inhibitory activity against the drug-sensitive HB3 and the drug-resistant FCM29 strains of *P. falciparum*, with IC50 values ranging from 8.0-43.0 and 16.1-93.0 μ g/mL, resp.

IT INDEXING IN PROGRESS

IT 99745-62-7P, 3,4,5-Tri-O-galloylquinic acid
 RL: BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
 (antiplasmodial activity of compds. from *Sloanea rhodantha rhodantha*)

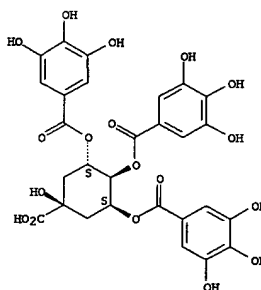
RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 1 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



L3 ANSWER 2 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:389411 CAPLUS

DOCUMENT NUMBER: 146:23351

TITLE: ILSMRs (intensifier of β -lactam-susceptibility in methicillin-resistant *Staphylococcus aureus*) from *Tara* [*Caesalpinia spinosa* (Molina) Kuntze]

AUTHOR(S): Kondo, K.; Takaiishi, Y.; Shibata, H.; Higuti, T.
 CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, University of Tokushima, Shomachi 1-78, Tokushima, 770-8505, Japan
 SOURCE: *Phytomedicine* (2006), 13(3), 209-212
 CODEN: PHYTOE; ISSN: 0944-7113
 PUBLISHER: Elsevier GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English

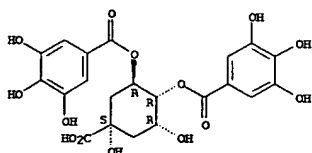
ED Entered STN: 28 Apr 2006
 AB Four quinic acid gallates were isolated from the dried pods of *Tara* [*Caesalpinia spinosa* (Molina) Kuntze]. These compds. intensified the susceptibility of methicillin-resistant *Staphylococcus aureus* (MRSA) to oxacillin. 3,4,5-Tri-O-galloylquinic acid Me ester (2) was the most effective compound of them.

IT 86687-37-8P, 3,4-Di-O-galloylquinic acid 99745-62-7P, 3,4,5-Tri-O-galloylquinic acid 125369-71-3P 735315-08-9P
 RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (quinic acid gallates from *Tara* [*Caesalpinia spinosa* (Molina) Kuntze])

RN 86687-37-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



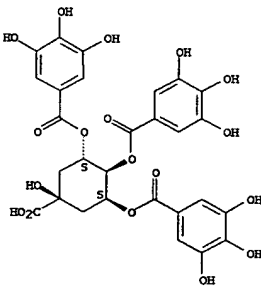
RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 2 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

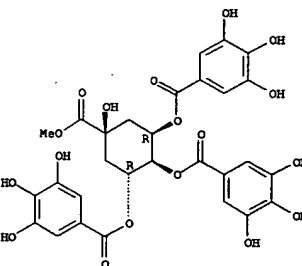
(Continued)



RN 125369-71-3 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-hydroxy-5-(methoxycarbonyl)-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

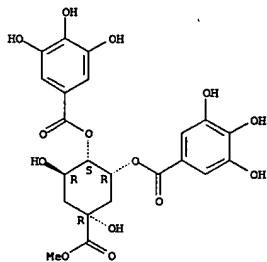


RN 735315-08-9 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-3,5-dihydroxy-5-(methoxycarbonyl)-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 2 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

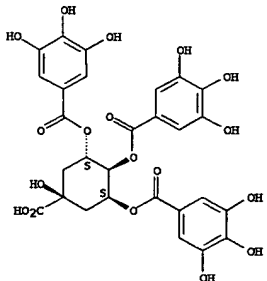


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1335793 CAPLUS
DOCUMENT NUMBER: 144:408247
TITLE: The South African and Namibian populations of the resurrection plant *Myrothamnus flabellifolius* are genetically distinct and display variation in their galloylquinic acid composition
AUTHOR(S): Moore, John P.; Farrant, Jill M.; Lindsey, George G.; Brandt, Wolf F.
CORPORATE SOURCE: Department of Molecular and Cellular Biology, University of Cape Town, Rondebosch, 7701, S. Afr.
SOURCE: Journal of Chemical Ecology (2005), 31(12), 2823-2834
CODEN: JCEC08; ISSN: 0098-0331
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Dec 2005
AB The polyphenol contents and compns. in desiccated leaves of *Myrothamnus flabellifolius* plants collected in various locations in Namibia and South Africa were analyzed using UV spectroscopy and high-performance liquid chromatog.-mass spectrometry. A study of the genetic relatedness of these populations was also performed by determination of the DNA sequence of the intergenic spacer region between the psbA and the trnH genes in the chloroplast genome. Namibian *M. flabellifolius* plants contained significantly more polyphenols than South African plants. Namibian plants essentially contained a single polyphenol, 3,4,5-tri-O-galloylquinic acid, whereas South African plants contained a variety of galloylquinic acids including 3,4,5-tri-O-galloylquinic acid together with higher mol. weight galloylquinic acids. Sequence anal. revealed a 1.4% divergence between Namibian and South African plants corresponding to the separation of these populations of approx. 4 + 106 years. The significance of the poly-phenol content and composition to the desiccation tolerance of the two populations is discussed.
IT 99745-62-7, 3,4,5-Tri-O-galloylquinic acid
RL: BSU (Biological study, unclassified); BIOL (Biological study) (Namibian plants contained only; South African and Namibian populations of resurrection plant *Myrothamnus flabellifolius* are genetically distinct and display variation in their galloylquinic acid composition)
RN 99745-62-7 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2e,3R,5e)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)
Relative stereochemistry.

L3 ANSWER 3 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

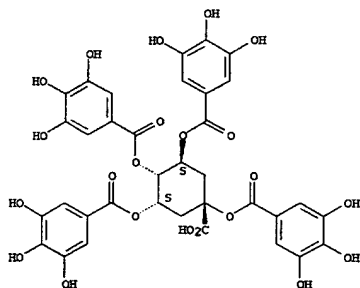


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:842688 CAPLUS
DOCUMENT NUMBER: 143:393226
TITLE: Application of liquid chromatography/electrospray ionization tandem mass spectrometry to the analysis of polyphenolic compounds from an infusion of *Byrsonima crassa* Niedenzu
AUTHOR(S): Sannomiya, Miriam; Montoro, Paola; Piacente, Sonia; Pizza, Cosimo; Brito, Alba R. M. S.; Vilegas, Wagner
CORPORATE SOURCE: Instituto de Química, Departamento de Química Orgânica, UNESP, Araraquara, CEP 14800-900, Brazil
SOURCE: Rapid Communications in Mass Spectrometry (2005), 19(16), 2244-2250
CODEN: RCMSEF; ISSN: 0951-4198
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 Aug 2005
AB A fast and reliable method, based on high-performance liquid chromatog. coupled to electrospray ionization ion trap tandem mass spectrometry (HPLC/ESI-ITMS), was developed to investigate the infusion prepared from the leaves of *Byrsonima crassa* Niedenzu (Malpighiaceae), a native plant used in Brazil against gastric disorders. The use of online reverse-phase HPLC/ESI-ITMS allowed separation of three major classes of compds. and identification of over 20 very polar compds. characterized as galloylquinic acids, proanthocyanidins, and flavonoid glycosides, as well as the dimeric flavonoid amentoflavone and minor amts. of galloyl hexose and galloyl saccharose. This approach provided data that will allow establishment of a method for a future standardization of the infusion.
IT 144300-48-1
RL: ANT (Analyte); NPO (Natural product occurrence); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence) (application of HPLC/ESI-ITMS to anal. of polyphenolic compds. from infusion of *Byrsonima crassa* Niedenzu)
RN 144300-48-1 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2e,3R,5e)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)
Relative stereochemistry.

L3 ANSWER 4 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

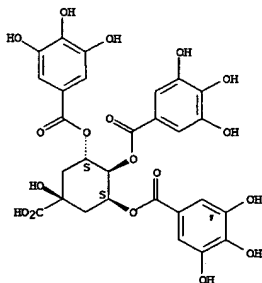


REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:1072612 CAPLUS
DOCUMENT NUMBER: 142:173332
TITLE: The predominant polyphenol in the leaves of the resurrection plant *Myrothamnus flabellifolius*, 3,4,5 tri-O-galloylquinic acid, protects membranes against desiccation and free radical-induced oxidation
AUTHOR(S): Moore, John P.; Westall, Kim L.; Ravenscroft, Neil; Farrant, Jill M.; Lindsey, George G.; Brandt, Wolf F.
CORPORATE SOURCE: Department of Molecular and Cellular Biology, University of Cape Town, Rondebosch, 7701, S. Afr.
SOURCE: Biochemical Journal (2005), 385(1), 301-308
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 16 Dec 2004
AB The predominant (>90%) low-mol.-mass polyphenol was isolated from the leaves of the resurrection plant *Myrothamnus flabellifolius* and identified to be 3,4,5 tri-O-galloylquinic acid using ¹H and ¹³C one- and two-dimensional NMR spectroscopy. The structure was confirmed by mass spectrometric anal. This compound was present at high concns., 44% (by weight) in hydrated leaves and 74% (by weight) in dehydrated leaves. Electron microscopy of leaf material fixed with glutaraldehyde and caffeine demonstrated that the polyphenols were localized in large vacuoles in both hydrated and dehydrated leaves. 3,4,5 Tri-O-galloylquinic acid was shown to stabilize an artificial membrane system, liposomes, against desiccation if the polyphenol concentration was between 1 and 2 µg/µg phospholipid. The phase transition of these liposomes observed at 46° was markedly diminished by the presence of 3,4,5 tri-O-galloylquinic acid, suggesting that the presence of the polyphenol maintained the membranes in the liquid crystalline phase at physiol. temps. 3,4,5 Tri-O-galloylquinic acid was also shown to protect linoleic acid against free radical-induced oxidation. 3,4,5 Tri-O-galloylquinic acid was shown to stabilize an artificial membrane system, liposomes, against desiccation if the polyphenol concentration was between 1 and 2 µg/µg phospholipid.
IT 99745-62-7P, 3,4,5 Tri-O-galloylquinic acid
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(PI; predominant polyphenol in leaves of *Myrothamnus flabellifolius*, 3,4,5 tri-O-galloylquinic acid, protects membranes against desiccation and free radical-induced oxidation)
RN 99745-62-7 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)
Relative stereochemistry.

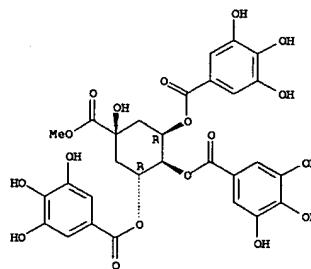
L3 ANSWER 5 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

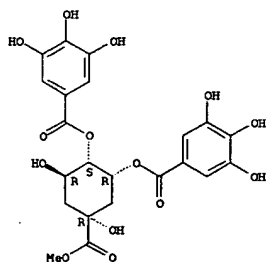
ACCESSION NUMBER: 2004:1058742 CAPLUS
DOCUMENT NUMBER: 142:686
TITLE: Antibacterial drug selection computer program and memory media for infection from resistant bacteria
INVENTOR(S): Higuchi, Tomihiko; Shibata, Hirofumi; Sato, Yoichi; Uesugi, Shigeru; Kobayashi, Masaki
PATENT ASSIGNEE(S): KLIMERS K-laboratories for Intelligent Medical Remote Services, Enkaku Iryou-laboratories Co., Ltd., Japan; Alps Pharmaceutical Ind. Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKKOAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
PATENT NO. KIND DATE APPLICATION NO. DATE
JP 2004348471 A 20041209 JP 2003-145248 20030522
JP 2003-145248 20030522
PRIORITY APPLN. INFO.:
ED Entered STN: 10 Dec 2004
AB Antibacterial drug selection computer program and memory media and data bases are offered for drug screening for infection from resistant bacteria with different genotypes, including methicillin-resistant staphylococcus. The antibacterials include antibiotics and pharmaceutical natural products.
IT 125369-71-3 735315-08-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibacterial drug selection computer program and memory media for infection from resistant bacteria)
RN 125369-71-3 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-hydroxy-5-(methoxycarbonyl)-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.



RN 735315-08-9 CAPLUS

L3 ANSWER 6 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-3,5-dihydroxy-5-(methoxycarbonyl)-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



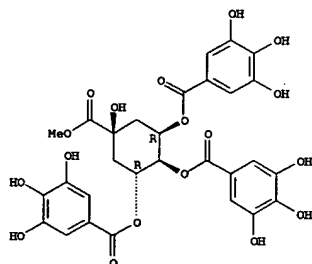
L3 ANSWER 7 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:648378 CAPLUS
 DOCUMENT NUMBER: 141:167738
 TITLE: Medicinal composition for treating infection with drug-resistant Staphylococcus aureus
 INVENTOR(S): Higuchi, Tomihiko; Shibata, Hirofumi; Sato, Yoichi; Takaiishi, Nobuhisa; Kawazoe, Kazuyoshi; Murakami, Kotaro
 PATENT ASSIGNEE(S): Alps Pharmaceutical Ind. Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 34 pp.
 DOCUMENT TYPE: CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION: Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004066992	A1	20040812	WO 2004-JP751	20040128
W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HD, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, EP 1604660	A1	20051214	EP 2004-705942	20040128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	A1	20061019	US 2005-543336	20050725
US 2006235076	A1	20061019	JP 2003-20611	A 20030129
PRIORITY APPLN. INFO.:			WO 2004-JP751	W 20040128

OTHER SOURCE(S): MARPAT 141:167738
 ED Entered STN: 12 Aug 2004
 AB Disclosed is a therapy for infection with a drug-resistant bacterium with the use of a characteristic of a polyhydric phenol derivative and/or Tara extract of potentiating the activity of a β -lactam antibiotic. More specifically, it is intended to provide a β -lactam antibiotic activity potentiator containing a polyhydric phenol derivative or its pharmaceutically acceptable salt, a medicinal composition for treating infection with a drug-resistant bacterium which contains a β -lactam antibiotic and a polyhydric phenol derivative and/or Tara extract, a therapeutic method, use for producing a medicinal composition, a disinfectant and a functional food containing a polyhydric phenol derivative and/or Tara extract. For example, a sugar-coated tablet was formulated containing isoamyl gallate 5, oxacillin 5, lactose 100, starch 30, Me cellulose 50, and talc 3 mg.
 IT 125369-71-3 735315-08-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (B-lactam antibiotic activity potentiator containing polyhydric phenol derivs. and/or Tara exts. for treating infection with drug-resistant Staphylococcus aureus)
 RN 125369-71-3 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2s,3R,5s)-5-hydroxy-5-(methoxycarbonyl)-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

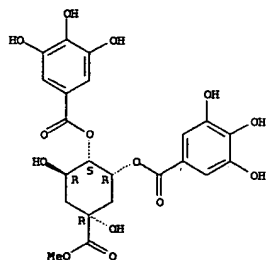
Absolute stereochemistry.

L3 ANSWER 7 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 735315-08-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-3,5-dihydroxy-5-(methoxycarbonyl)-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

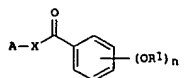
Absolute stereochemistry.



L3 ANSWER 8 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:631765 CAPLUS
 DOCUMENT NUMBER: 141:173963
 TITLE: Nitric oxide synthase inhibitors containing ring structures
 INVENTOR(S): Watanabe, Masamichi; Ino, Akira; Yasui, Takeshi; Kato, Kenji
 PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.
 DOCUMENT TYPE: CODEN: JXOXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION: Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004217600	A	20040805	JP 2003-9668	20030117
PRIORITY APPLN. INFO.:			JP 2003-9668	20030117

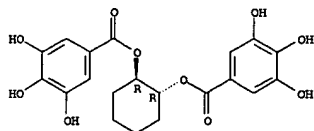
ED Entered STN: 06 Aug 2004
 GI



AB Nitric oxide synthase (NOS) inhibitors having the formula (I) (ring A is optionally substituted hydrocarbon ring or the hetero ring (except parazolopyrimidine); X = single bond, -O-, -(CR2R3)mO-, -O(CR2R3)m-, -N(R4)-, -CON(R4) (CR2R3)mO-, -O(CR2R3)mCON(R4)-, -N(R4) (CR2R3)mO-, -O(CR2R3)mN(R4)-, -O(CR2R3)mO-, -COO(CR2R3)mO-, or -CON(R4)N(R5)-; R1 = hydrogen, lower alkyl, or aryl lower alkyl; R2 and R3 = hydrogen or lower alkyl; R4 and R5 = hydrogen, lower alkyl, or carbamoyl; n is integer 1-3, m is integer 1-5), are disclosed. Preferably, the ring A is optionally substituted cyclo alkane, bicyclo alkane, benzene, tetrahydropyran, dihydropyran, THF, pyrrolidine, piperidine, piperazine, pyridine, or pyrimidine. Synthesis of those compds. are described in examples. Inhibitory effect of some of those compds. were tested on two isoforms of NOS, nNOS and iNOS. Compds. of this invention showed particularly strong inhibition of iNOS.
 IT 732310-61-1P
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (nitric oxide synthase inhibitors containing ring structures)
 RN 732310-61-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R)-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 8 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



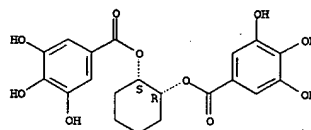
L3 ANSWER 9 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:483478 CAPLUS
 DOCUMENT NUMBER: 142:48469
 TITLE: Structure-activity relationships of synthetic analogs of (-)-epigallocatechin-3-gallate as proteasome inhibitors
 AUTHOR(S): Kazi, Aslamuzzaman; Wang, Zhigang; Kumar, Naveen; Falsetti, Samuel C.; Chan, Tak-Hang; Dou, Q. Ping
 CORPORATE SOURCE: University of South Florida, Tampa, FL, 33612, USA
 SOURCE: Anticancer Research (2004), 24(2B), 943-954
 CODEN: ANTRD4; ISSN: 0250-7005
 PUBLISHER: International Institute of Anticancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 16 Jun 2004
 AB Background: Cancer-related mol. targets of green tea polyphenols, such as (-)-epigallocatechin-3-gallate [(-)-EGCG], remain unknown. We previously showed that (-)-EGCG is a potent and specific inhibitor of the proteasomal chymotrypsin-like activity in vitro and in vivo. Materials and Methods: EGCG amides and five simple analogs were prepared by enantioselective synthesis. Proteasome inhibition in vitro was measured by fluorogenic substrate assay and in vivo by accumulation of proteasome target proteins (p27, I-kappa.Ba and Bax). Inhibition of tumor cell proliferation was determined by G1 arrest, DNA fragmentation and colony formation inhibition. Results: EGCG analogs with modifications in the A-ring, C-ring or ester bond inhibit the chymotrypsin-like activity of purified 20S proteasome with altered potencies. However, these compds. were able to potentially inhibit the proteasome activity in vivo and also suppress colony formation of prostate cancer LNCaP cells. Some compds. caused G1 arrest and DNA fragmentation in leukemia Jurkat T cells. However, these EGCG analogs caused no or little proteasome inhibition in normal or nontransformed cells. Conclusion: The A-ring and gallate ester/amide bond are essential for the proteasome-inhibitory function of (-)-EGCG.

IT 808196-20-5, GTP 1
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (GTP-1 increased p27, I-kB-α, Bax and polyubiquitinated protein and no effect on actin in human prostate cancer cell line LNCaP)
 RN 808196-20-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S)-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

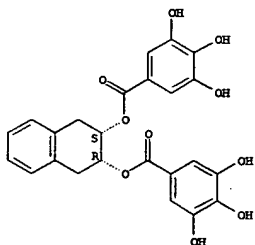
Absolute stereochemistry.



L3 ANSWER 9 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 808196-22-7, GTP 4
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (GTP-4 significantly increased p27, I-kB-α, Bax and polyubiquitinated protein in LNCaP cells, human Jurkat T cells than GTP-1, -2, -3 suggesting requirement of A-ring for inhibiting proteasome activity in GTP-4)
 RN 808196-22-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3S)-1,2,3,4-tetrahydro-2,3-naphthalenediyl ester (9CI) (CA INDEX NAME)

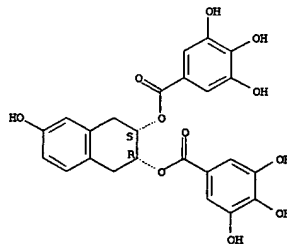
Absolute stereochemistry.



IT 808196-23-8, GTP 5
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (GTP-5 significantly increased p27, I-kB-α, Bax and polyubiquitinated protein in LNCaP cells, human Jurkat T cells than GTP-1, -2, -3 suggesting requirement of A-ring for inhibiting proteasome activity in GTP-5)
 RN 808196-23-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3S)-1,2,3,4-tetrahydro-6-hydroxy-2,3-naphthalenediyl ester, rel- (9CI) (CA INDEX NAME)

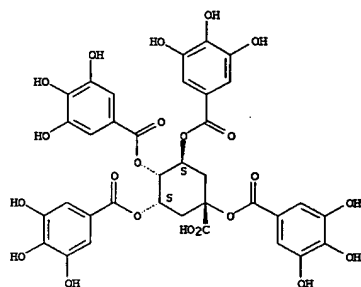
Relative stereochemistry.

L3 ANSWER 9 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:998044 CAPLUS
 DOCUMENT NUMBER: 141:446
 TITLE: Constituents of *Hiraea reclinata* and their anti-HIV activity
 AUTHOR(S): Hussein, Ahmed A.; Gomez, Basilio; Ramos, Maria; Heller, Maria; Coley, Phyllis D.; Solis, Pablo N.; Gupta, Mahabir P.
 CORPORATE SOURCE: Centro de Investigaciones Farmacognosticas de la Flora
 Panama, Facultad de Farmacia, Universidad de Panama, Apartado, 10767, Panama
 SOURCE: Revista Latinoamericana de Quimica (2003), 31(2), 74-77
 CODEN: RLAQAS; ISSN: 0370-5943
 PUBLISHER: Laboratorios Mimim S.A de C.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 23 Dec 2003
 AB From the methanolic extract of *Hiraea reclinata*, seven known compds. were isolated. Only 1,3,4,5-tetragalloyl quinic acid showed anti-HIV activity.
 IT 144300-48-1P
 RI: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (anti-HIV activity of *Hiraea reclinata* constituents: methanolic extract of mature leaves yielded seven compds., 1,3,4,5-tetragalloyl quinic acid showed anti-HIV activity)
 RN 144300-48-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)
 Relative stereochemistry.



L3 ANSWER 11 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2003:819734 CAPLUS
 DOCUMENT NUMBER: 140:235398
 TITLE: Enhancement effect of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide and cationic surfactant on the chemiluminescence of poly(3,4,5-trihydroxybenzoate ester)dendrimers
 AUTHOR(S): Nakazono, Manabu; Yamazaki, Naoka; Ma, Li; Zaitzu, Kiyoshi
 CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Kyushu University, Higashi-ku, Fukuoka, 812-8582, Japan
 SOURCE: Luminescence (2003), 18(4), 239-242
 CODEN: LUMIFC; ISSN: 1522-7235
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 19 Oct 2003
 GI

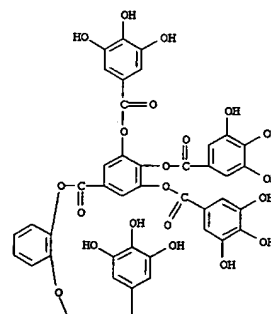
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB In the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC), the chemiluminescence (CL) intensities of poly(3,4,5-trihydroxybenzoate ester)dendrimers, I and II, having 1,2-pyrocatechol and 1,3,5-trihydroxybenzene as core mols. and also six and nine gallic acid units in the periphery, were resp. 7.4- and 2.4-fold stronger than those of I and II in the absence of EDC. Similarly, the CL intensities of I and II in the presence of cetyltrimethylammonium bromide (CTAB) were resp. 4- and 1.7-fold stronger than those of I and II in the absence of CTAB.
 IT 583041-65-0 583041-66-1
 RI: PRP (Properties)
 (enhancement effect of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide and cationic surfactant on chemiluminescence of poly(3,4,5-trihydroxybenzoate ester)dendrimers)
 RN 583041-65-0 CAPLUS
 CN Benzoic acid, 3,4,5-tris[(3,4,5-trihydroxybenzoyl)oxy]-, 1,2-phenylene ester (9CI) (CA INDEX NAME)

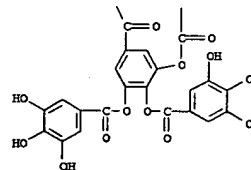
L3 ANSWER 10 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



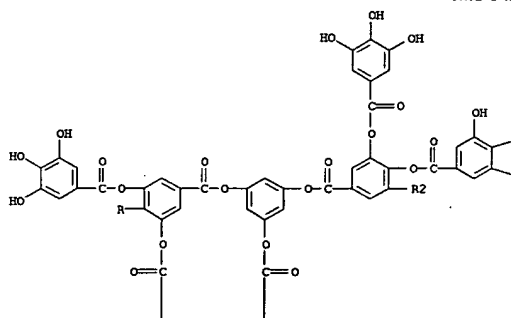
PAGE 2-A



RN 583041-66-1 CAPLUS
 CN Benzoic acid, 3,4,5-tris[(3,4,5-trihydroxybenzoyl)oxy]-, 1,3,5-benzenetriyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 11 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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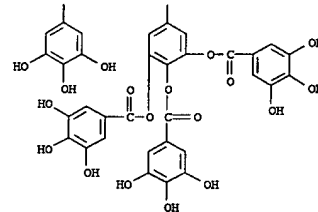
PAGE 1-B

OH

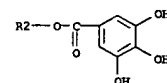
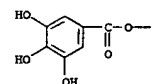
OH

L3 ANSWER 11 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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PAGE 3-A

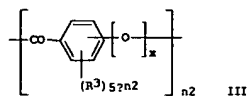
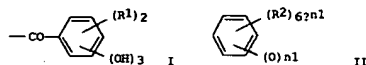


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:673840 CAPLUS
 DOCUMENT NUMBER: 139:204801
 TITLE: Chemiluminescent polyphenol dendrimers and their compositions for high-sensitivity chemiluminescent analysis
 INVENTOR(S): Zaitou, Kiyoshi; Nakazono, Manabu
 PATENT ASSIGNEE(S): Sangaku Renkei Kiko Kyushu K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JXOQAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238495	A	20030827	JP 2002-44398	20020221
PRIORITY APPL. INFO.:			JP 2002-44398	20020221
EO Entered STM: 28 Aug 2003				
GI				



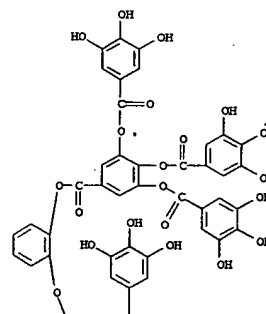
AB The polyphenol dendrimers have core sites, branched sites, and terminals represented by general formula I (R1 = H, aliphatic hydrocarbyl, alicyclic hydrocarbyl, aromatic hydrocarbyl, halo, ether, ester, acyl, amino, cyano, nitro, heterocyclic; these groups may have substituents; 3 OH locate adjacent to each other). The OH on the terminal groups are capable of forming H bonds with anal. objects. The polyphenol dendrimers may have core sites represented by general formula II and III (R2 R3 = any definitions given for R1; n1 = 1-6 integer, n2 = 1-5 integer; X (generation) ≥ 1 integer). The comps. contain the polyphenol dendrimers and ≥ 1 of sensitizers selected from dicyclohexylcarbodiimide, 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (EDC), cetyltrimethylammonium bromide (CTAB), didodecyltrimethylammonium bromide (DAB), Na dodecylsulfonate (SDS), poly(oxyethylene) (20) sorbitan monolaurate (Tween 20), and poly(oxyethylene) (20) sorbitan trioleate (Tween 85).

IT 583041-65-OP 583041-66-1P
 RL: ARG (Analytical reagent use); IMF (Industrial manufacture); ANST (Analytical study); PREP (Preparation); USES (Uses)
 (chemiluminescent polyphenol dendrimers bearing OH terminals and their comps. with sensitizers for high-sensitivity chemiluminescent anal.)
 RN 583041-65-0 CAPLUS

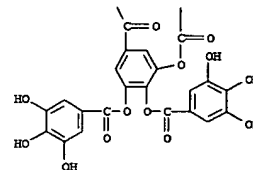
L3 ANSWER 12 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN Benzoic acid, 3,4,5-tris[(3,4,5-trihydroxybenzoyl)oxy]-, 1,2-phenylene ester (9CI) (CA INDEX NAME)

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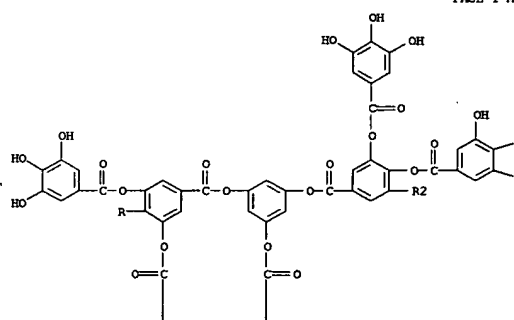
PAGE 2-A



RN 583041-66-1 CAPLUS
 CN Benzoic acid, 3,4,5-tris[(3,4,5-trihydroxybenzoyl)oxy]-, 1,3,5-benzenetriyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 12 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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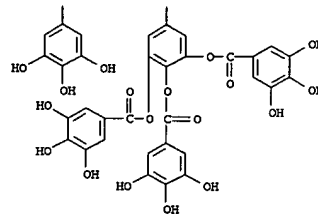
PAGE 1-B

OH

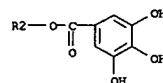
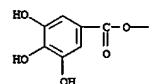
OH

L3 ANSWER 12 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L3 ANSWER 13 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:187734 CAPLUS

DOCUMENT NUMBER: 138:397882

TITLE: Antioxidant activity of galloyl quinic derivatives isolated from *P. lentiscus* leaves

AUTHOR(S): Baratto, Maria Camilla; Tattini, Massimiliano; Galardi, Carlotta; Pinelli, Patrizia; Romani, Annalisa; Visioli, Francesco; Basosi, Riccardo; Pogni, Rebecca

CORPORATE SOURCE: Dipartimento di Chimica, Università degli Studi di Siena, Siena, I-53100, Italy

SOURCE: Free Radical Research (2003), 37(4), 405-412

CODEN: FRARER; ISSN: 1071-5762

PUBLISHER: Taylor & Francis Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 11 Mar 2003

AB The antioxidant properties of galloyl quinic derivs. isolated from *Pistacia lentiscus* L. leaves have been investigated by means of ESR spectroscopy (EPR) and UV-Vis spectrophotometry. Antioxidant properties have been also estimated using the biol. relevant LDL test. The scavenger activities of gallic acid, and 5-O-galloyl, 3,5-O-digalloyl, and 3,4,5-O-trigalloyl quinic acid derivs. have been estimated against 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical, superoxide (O₂⁻) radical, and hydroxyl (OH) radical. On the whole, the scavenger activity increased as the number of galloyl groups on the quinic acid skeleton increased. The half-inhibition concns. (IC₅₀) of di- and tri-galloyl derivs. did not exceed 30 μM for all the tested free radicals. All the tested metabolites strongly reduced the oxidation of low-d. lipoproteins (LDL), following a trend similar to that observed for the scavenger ability against OH radical.

IT 99745-62-7

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

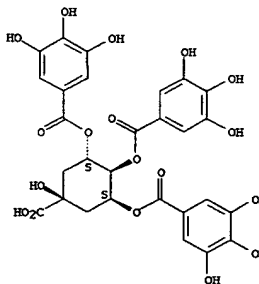
(galloyl quinic derivs. isolated from *P. lentiscus* leaves exhibit antioxidant activity toward reactive oxygen species)

RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 13 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

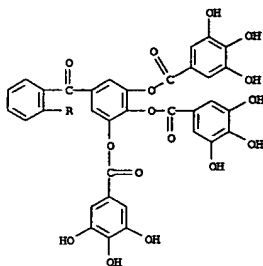


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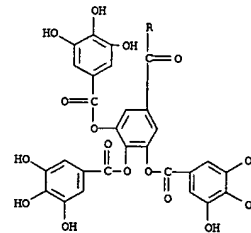
44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:788591 CAPIUS
 DOCUMENT NUMBER: 138:107090
 TITLE: Synthesis of poly(3,4,5-trihydroxybenzoate ester) dendrimers and their chemiluminescence
 AUTHOR(S): Nakazono, Manabu; Ma, Li; Zaitzu, Kiyoshi
 CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Kyushu University, Higashi-ku, Fukuoka, 812-8582, Japan
 SOURCE: Tetrahedron Letters (2002), 43(45), 8185-8189
 CODEN: TETLEAT; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 16 Oct 2002
 AB Gallic acid (GA) and gallic acid Me ester (GM), polyphenol chemiluminescence (CL) compds., produce light in the presence of alkali and hydrogen peroxide. First-generation polyphenol dendrimers with GA units in the periphery were synthesized in order to obtain polyphenol compds. with a strong CL intensity. The CL intensities of the poly(3,4,5-trihydroxybenzoate ester) dendrimers are approx. 400- and 600-fold stronger than that of GA, resp.
 IT 486997-19-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (first generation dendrimer; synthesis of poly(3,4,5-trihydroxybenzoate ester) dendrimers and their chemiluminescence)
 RN 486997-19-7 CAPIUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 1,2-phenylenebis(carbonyl-5,1,2,3-benzenetetrayl) ester (9CI) (CA INDEX NAME)

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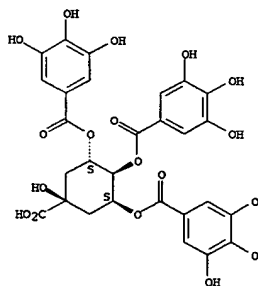
L3 ANSWER 14 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN (Continued)
 PAGE 2-A



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2002:282317 CAPIUS
 DOCUMENT NUMBER: 137:329320
 TITLE: Identification and quantification of galloyl derivatives, flavonoid glycosides and anthocyanins in leaves of Pistacia lentiscus L.
 AUTHOR(S): Romani, A.; Pinelli, P.; Galardi, C.; Mulinacci, N.; Tattini, M.
 CORPORATE SOURCE: Dip. di Sci. Farm., Univ. degli Studi, Florence, I-50121, Italy
 SOURCE: Phytochemical Analysis (2002), 13(2), 79-86
 CODEN: PHANAL; ISSN: 0958-0344
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 16 Apr 2002
 AB The separation, identification and quantification of polyphenols were carried out on leaves of Pistacia lentiscus L., an evergreen member of the family Anacardiaceae, using semi-preparative HPLC, HPLC-photodiode array detection and HPLC-MS anal., together with IR and ¹³C NMR. Three major classes of secondary metabolites were detected: gallic acid and galloyl derivs. of both glucose and quinic acid; flavonol glycosides; and anthocyanins, namely delphinidin 3-O-glucoside and cyanidin 3-O-glucoside. Low amts. of catechin were also detected. The concentration of galloyl derivs. was extremely high, representing 5.3% of the leaf dry weigh, and appreciable amts. of myricetin derivs. were also detected. These findings may be useful in establishing a relationship between the chemical composition of the leaf extract and the previously reported biol. activity of P. lentiscus, and may also assign a new potential role of P. lentiscus tissue exts. in human health care.
 IT 99745-62-7, 3,4,5-O-Trigalloylquinic acid
 RL: NPO (Natural product occurrence); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
 (identification and quantification of galloyl derivs., flavonoid glycosides and anthocyanins in leaves of Pistacia lentiscus)
 RN 99745-62-7 CAPIUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5e)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)
 Relative stereochemistry.

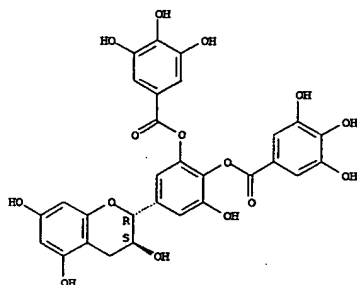
L3 ANSWER 15 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

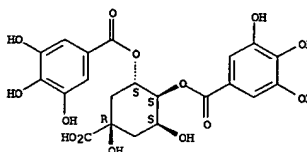
L3 ANSWER 16 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2001:646295 CAPLUS
 DOCUMENT NUMBER: 136:205155
 TITLE: Inhibitory effects of tannins on tyrosinase activity
 AUTHOR(S): Cho, Su-Min; Kim, Jee-Hun; Lee, Min-Won
 CORPORATE SOURCE: College of Pharmacy, Chung Ang University, Seoul, 156-756, S. Korea
 SOURCE: Saengyak Hakhochi (2001), 32(1), 68-71
 CODEN: SYHJAH; ISSN: 0253-3073
 PUBLISHER: Korean Society of Pharmacognosy
 DOCUMENT TYPE: Journal
 LANGUAGE: Korean
 ED Entered STN: 05 Sep 2001
 AB For the use of tannins in the whitening-effect cosmetics, inhibitory effect against tyrosinase activity was determined. Three condensed tannins including galliccatechin, galliccatechin 3',4'-di-O-gallate and epicatechin 3-O-gallate and three hydrolyzable tannins, 1,2,6-tri-O-galloyl- β -D-glucose, 2,3-(S)-BHPD-D-glucose and pedunculagin showed 15-29% mild inhibitory effects against tyrosinase activity.
 IT 400773-30-0
 RI: COS (Cosmetic use); PAC (Pharmacological activity); BIOL (Biological study); USES (Uses)
 (tannins for inhibition of tyrosinase)
 RN 400773-30-0 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-[(2R,3S)-3,4-dihydro-3,5,7-trihydroxy-2H-1-benzopyran-2-yl]-3-hydroxy-1,2-phenylene ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 17 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2000:811999 CAPLUS
 DOCUMENT NUMBER: 134:97898
 TITLE: Gallotannins and related polyphenols from Pistacia weinmannifolia
 AUTHOR(S): Hou, Ai-Jun; Peng, Li-Yan; Liu, Yan-Ze; Lin, Zhong-Wen; Sun, Han-Dong
 CORPORATE SOURCE: Laboratory of Phytochemistry, Kunming Institute of Botany, Academia Sinica, Kunming, Peop. Rep. China
 SOURCE: Planta Medica (2000), 66(7), 624-626
 CODEN: PLMEAA; ISSN: 0032-0943
 PUBLISHER: Georg Thieme Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 20 Nov 2000
 AB Two new gallotannins, pistafolins A and B, were isolated from the leaf extract of Pistacia weinmannifolia. Their structures were determined by spectral methods. Four known gallotannins, seven known flavonoid glycosides, along with 1-O- β -D-(6'-O-galloyl)-glucopyranosyl-3-methoxy-5-hydroxybenzene, gallic acid, hexagallate, (+)-catechin, and (+)-galliccatechin, were also isolated. Some of these compounds were tested for their cytotoxicity toward K562 cells, and two small mol. phenolic compounds, gallic acid and (+)-galliccatechin, showed significant inhibitory effects with IC50 values less than 5 μ g/mL.
 IT 318955-28-1P, 4,5-Di-O-Galloylquinic acid
 RI: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (isolation, structure and cytotoxicity of gallotannins and related polyphenols from Pistacia weinmannifolia)
 RN 318955-28-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,3S,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

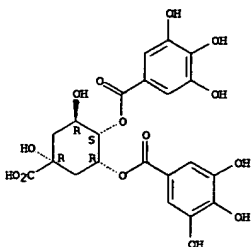
Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

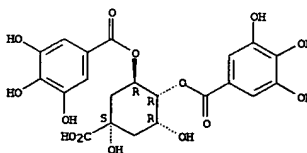
L3 ANSWER 18 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2000:69138 CAPLUS
 DOCUMENT NUMBER: 132:262227
 TITLE: HPLC isolation, identification and quantification of tannins from Guiera senegalensis
 Bouchet, Nathalie; Levesque, Joel; Poussot, Jean-Louis
 CORPORATE SOURCE: Faculte de Medecine et de Pharmacie, Laboratoire de Pharmacognosie, Poitiers, 86005, Fr.
 SOURCE: Phytochemical Analysis (2000), 11(1), 52-56
 CODEN: PHANEL; ISSN: 0958-0344
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 30 Jan 2000
 AB Nine galloylquinic acids, namely, 3-O-, 5-O-, 1,3-di-O-, 3,4-di-O-, 3,5-di-O-, 4,5-di-O-, 1,3,4-tri-O-, 3,4,5-tri-O- and 1,3,4,5-tetra-O-galloylquinic acid, were isolated by column chromatog. and preparative HPLC from different parts of Guiera senegalensis. HPLC methods for the identification and quantification of gallotannins were perfected for the different plant parts. Isolation methods were performed using a solvent gradient dependent on the tannin composition. An isocratic method was used to quantify the main tannin (3,4,5-tri-O-galloylquinic acid) and 1,3,4,5-tetra-O-galloylquinic acid, which has already been studied with respect to its pharmacol. activities, as well as 3,5-di-O- and 4,5-di-O-galloylquinic acids. The leaves, galls, stems and roots showed quant. and qual. differences with respect to the chemical composition of their tannins.
 IT 53505-97-8P 86687-37-8P, 3,4-Di-O-galloylquinic acid
 94414-04-7P 123166-70-1P 263244-51-5P
 RI: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)
 (HPLC isolation, identification and quantification of tannins from Guiera senegalensis)
 RN 53505-97-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



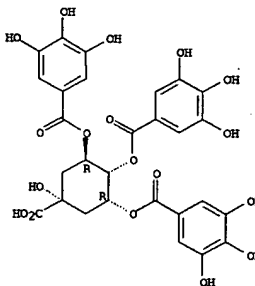
L3 ANSWER 18 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 94414-04-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

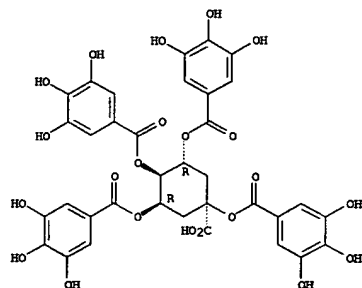
Absolute stereochemistry.



RN 123166-70-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

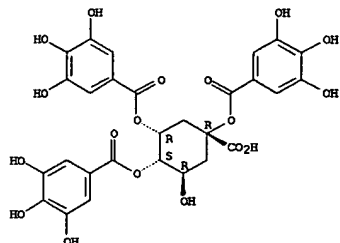
Absolute stereochemistry.

L3 ANSWER 18 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 263244-51-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2R,4R,6R)-4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

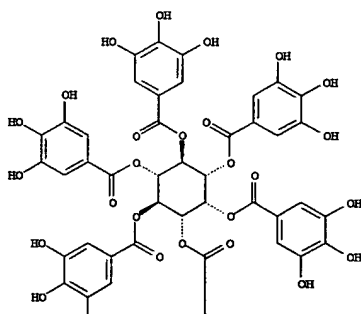
Absolute stereochemistry.



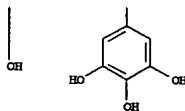
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

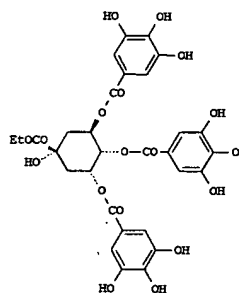
L3 ANSWER 19 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:470146 CAPLUS
 DOCUMENT NUMBER: 131:253871
 TITLE: Binding affinities of gallotannin analogs with bovine serum albumin: ramifications for polyphenol-protein molecular recognition
 AUTHOR(S): Feldman, K. S.; Sambandam, A.; Lemon, S. T.; Nicevonger, R. B.; Long, G. S.; Battaglia, D. F.; Ensel, S. M.; Leci, M. A.
 CORPORATE SOURCE: Department of Chemistry, The Pennsylvania State University, University Park, PA, 16802, USA
 SOURCE: Phytochemistry (1999), 51(7), 867-872
 CODEN: PHYCAS; ISSN: 0031-9422
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 131:253871
 ED Entered STN: 02 Aug 1999
 AB A series of gallotannin analogs were prepared by chemical synthesis, and their affinity for the test-case protein bovine serum albumin was measured by equilibrium dialysis. The structure/activity data obtained suggest that the naturally occurring gallotannins, in fact, do not represent the optimal protein recognition agents amongst polyphenolated templates.
 IT 245109-49-3P
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
 (binding affinities of gallotannin analogs with bovine serum albumin and ramifications for polyphenol-protein mol. recognition)
 RN 245109-49-3 CAPLUS
 CN myo-Inositol, hexakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 20 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

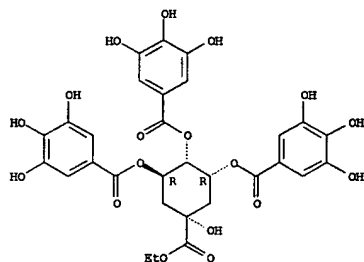
ACCESSION NUMBER: 1998:573889 CAPLUS
 DOCUMENT NUMBER: 129:173093
 TITLE: 3,4,5-Tri-O-galloylquinic acid ethyl ester from Guiera senegalensis
 AUTHOR(S): Bouchet, Nathalie; Levesque, Joel; Bodo, Bernard; Fousset, Jean-Louis
 CORPORATE SOURCE: Laboratoire de Pharmacognosie, Faculte de Medecine et de Pharmacie, Poitiers, 86005, Fr.
 SOURCE: Pharmaceutical Biology (Lisse, Netherlands) (1998), 36(1), 63-65
 CODEN: PHBIPO; ISSN: 1388-0209
 PUBLISHER: Swets & Zeitlinger B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 10 Sep 1998
 GI



AB A new polyphenol, 3,4,5-tri-O-galloylquinic acid Et ester (I), accompanied by other quinic acid gallates, 3,5-di-O-, 3,4,5-tri-O-, and 1,3,4,5-tetra-O-galloylquinic acids, was isolated from the leaves of Guiera senegalensis (Combretaceae).
 IT 211388-30-6P
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (3,4,5-Tri-O-galloylquinic acid Et ester from Guiera senegalensis)
 RN 211388-30-6 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-(ethoxycarbonyl)-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 20 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



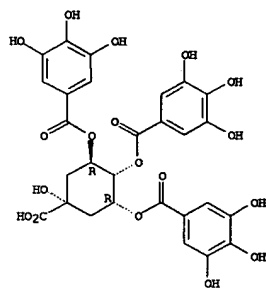
IT 94414-04-7P 123166-70-1P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

RN 94414-04-7 CAPLUS (quinic acid gallates from *Gulera senegalensis*)

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123166-70-1 CAPLUS

L3 ANSWER 21 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:454361 CAPLUS

DOCUMENT NUMBER: 129:197563

TITLE: Study on the inhibitory effect of tannins and flavonoids against the 1,1-diphenyl-2-picrylhydrazyl radical

AUTHOR(S): Yokozawa, Takako; Chen, Cui Ping; Dong, Erbo; Tanaka, Takashi; Nonaka, Gen-Ichiro; Nishioka, Itsuo
CORPORATE SOURCE: Research Institute for Wakan-Yaku, Toyama Medical and Pharmaceutical University, Toyama, 930-0194, Japan
SOURCE: Biochemical Pharmacology (1998), 56(2), 213-222
CODEN: BCPHAG; ISSN: 0006-2952
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 22 Jul 1998

AB Fifty-one tannins and forty-one flavonoids isolated from Oriental medicinal herbs were evaluated for their antioxidant ability with a 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical-generating system. The results showed that tannins and certain flavonoids are potential free-radical scavengers, and that their activity against the DPPH radical is closely associated with their chemical structure. A comparison of the

two classes of compds. showed that tannins have more potential than flavonoids because almost all the tannins demonstrated significant scavenging action within a low concentration range, whereas the activity of flavonoids varied distinctively among the different compds. An increase of galloyl groups, mol. weight, and ortho-hydroxyl structure enhanced the activity of tannins, whereas the number and position of hydroxyl groups were important features for the scavenging of free radicals by flavonoids. Moreover, it appeared that when the free hydroxyl group was methoxylated or glycosylated, the inhibitory activity was obviously decreased or even abolished.

IT 145108-20-9 145108-21-0 188977-23-3,

3,4-Di-O-galloyl shikimic acid

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitory effect of tannins and flavonoids against 1,1-diphenyl-2-picrylhydrazyl radical)

RN 145108-20-9 CAPLUS

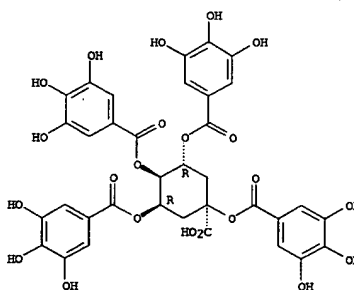
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 20 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

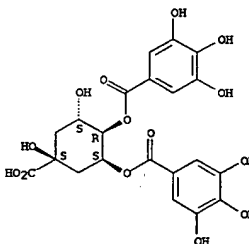


REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

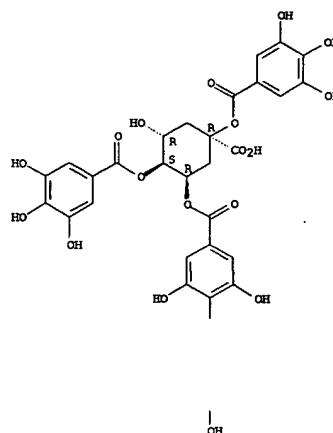


RN 145108-21-0 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,4S,6S)-4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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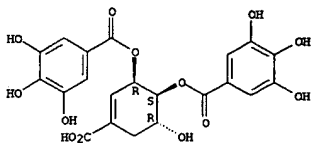
PAGE 2-A

L3 ANSWER 21 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 188977-23-3 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,6R)-4-carboxy-6-hydroxy-3-cyclohexene-1,2-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:306463 CAPLUS

DOCUMENT NUMBER: 129:117439

TITLE: Radical scavenging activity and antioxidant properties of tannins from *Guiera senegalensis* (Combretaceae)

AUTHOR(S): Bouchet, Nathalie; Barrier, Laurence; Fauconneau, Bernard

CORPORATE SOURCE: Laboratoire de Pharmacognosie, Faculte de Medecine et de Pharmacie, Poitiers, F-86005, Fr.

SOURCE: Phytotherapy Research (1998), 12(3), 159-162

CODEN: PHYREH; ISSN: 0951-418X

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 25 May 1998

AB The antioxidant properties of nine tannins isolated and characterized from different parts of *Guiera senegalensis* were evaluated. Interesting results showed that galloylquinic acids (hydrolyzable tannins), resulting from a tri- or tetra-substitution of galloyl groups on the quinic acid skeleton, played a crucial role in the inhibitory effect on Fe²⁺-induced lipid peroxidation in rat liver microsomes and radical scavenger activity in the 1,1-diphenyl-2-picrylhydrazyl (DPPH) test. The effects of all tannins were markedly higher than that of gallic acid. Condensed tannins such as epicatechin and epigallocatechin gallate also showed fairly significant effects in both tests.

IT 53505-97-8 99745-62-7, 3,4,5-Tri-O-galloylquinic acid

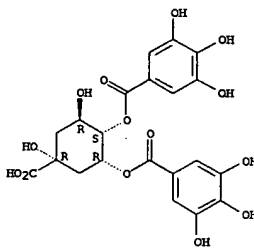
110082-89-8 123166-70-1

RI: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); FRP (Properties); TRU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (radical scavenging activity and antioxidant properties of tannins from *Guiera senegalensis* (Combretaceae))

RN 53505-97-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

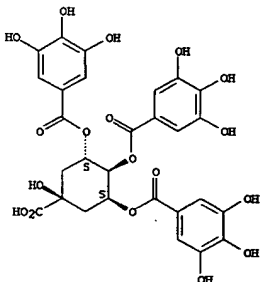


L3 ANSWER 22 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



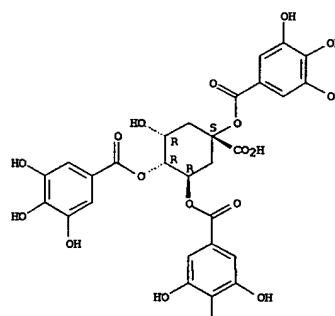
RN 110082-89-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, [1R-(1a,2b,4a,6a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 22 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



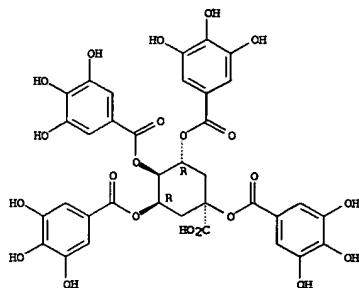
PAGE 2-A

RN 123166-70-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 22 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

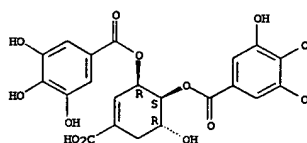
L3 ANSWER 23 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:193669 CAPLUS
DOCUMENT NUMBER: 128:268213
TITLE: Tannins and related compounds from *Erodium moschatum* (L.) L'Her
AUTHOR(S): Lin, Jer-Huei; Lin, Mei-Fan
CORPORATE SOURCE: Department of Health, Executive Yuan, National Laboratories of Foods and Drugs, Taipei, Taiwan
SOURCE: Yaowu Shipin Fenxi (1997), 5(4), 347-354
CODEN: YSFEEP; ISSN: 1021-9498
PUBLISHER: National Laboratories of Food and Drugs, Dep. of Health, Executive Yuan
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 03 Apr 1998
AB *Erodium moschatum* is a newly naturalized plant in Taiwan. From the aqueous acetone extract of the fresh herb, seventeen tannins and related compds. were

isolated. They included five phenolcarboxylic acids and ester including: protocatechuic acid, gallic acid, Me gallate, caffeic acid, brevifolinicarbonylic acid; four gallotannins: 3-O-galloylshikimic acid, 3,4-di-O-galloylshikimic acid, 3,5-di-O-galloylshikimic acid, 1-O-galloyl-β-D-glucose; six ellagitannins and other related compds. which include corilagin, furosin, geraniin, acetylgeraniin A, Me gallate 3-O-β-D-glucoside, gallic acid 3-O-β-D-(6'-O-galloyl)-glucoside and two flavonoids: kaempferol, quercetin. These structures were identified on the basis of their phys. data and spectroscopic evidence.

IT 188977-23-3, 3,4-Di-O-galloylshikimic acid
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(tannins and related compds. from *Erodium moschatum*)
RN 188977-23-3 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,6R)-4-carboxy-6-hydroxy-3-cyclohexene-1,2-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 24 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:655454 CAPLUS
DOCUMENT NUMBER: 127:298548
TITLE: Dermatologic preparation
INVENTOR(S): Murase, Takatoshi; Hase, Tadashi; Tokimitsu, Ichiro
PATENT ASSIGNEE(S): Kao Corporation, Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: P1XXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9735618	A1	19971002	WO 1997-JP488	19970221
W: CN, US, VN				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 0925547	A	19970930	JP 1996-66077	19960322
JP 1996-66077	A	19960322		

ED Entered STN: 15 Oct 1997

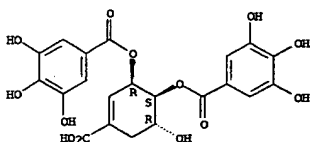
AB A dermatol. preparation containing an NFκB activation inhibitor and usable for preventing or ameliorating epidermolysis, pachymenia, skin chapping, disorder of skin texture, pigmentation, degeneration or breakdown of corium constituents, and pruritus, thus being useful for various skin troubles.

IT 188977-23-3
RL: BSU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dermatol. preparation containing NFκB activation inhibitor)

RN 188977-23-3 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,6R)-4-carboxy-6-hydroxy-3-cyclohexene-1,2-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 25 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

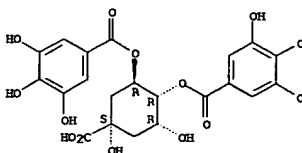
ACCESSION NUMBER: 1997:520938 CAPLUS
DOCUMENT NUMBER: 127:259292
TITLE: Lignans and tannins as inhibitors of viral reverse transcriptase and human DNA polymerase-α: QSAR analysis and molecular modeling
AUTHOR(S): Liu, Karin C.S.; Chen, Lee, Shuei-Sheng; Lin, Mei-Tsur; Chang, Chia-Wen; Liu, Chao-Lin; Lin, Jung-Yaw; Hsu, Feng-Lin; Ren, Shijun; Lien, Eric J.
CORPORATE SOURCE: School of Pharmacy, College of Medicine, National Taiwan University, Taipei, Taiwan
SOURCE: Medicinal Chemistry Research (1997), 7(3), 168-179
CODEN: MCREEB; ISSN: 1054-2523
PUBLISHER: Birkhaeuser
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Aug 1997
AB The inhibitory activities against HIV-1 virus reverse transcriptase (RT) and human DNA polymerase-α (hDNAp-α) of 15 lignans and tannins isolated from Chinese herbs were correlated with physicochem. parameters (μ, log mol. weight, Hb, I). From the overall shapes of 3-D structures, a T-shaped perpendicular ring system gave the best differential inhibition against HIV-1 RT, whereas a more complicated w-shaped ring system was associated with high inhibition against both HIV-1 RT and hDNAp-α. These findings indicate that there are different structural requirements for the inhibition of each of the target enzymes.

IT 86687-37-8, 3,4-Di-O-galloylshikimic acid 94414-04-7
129159-07-5, 3,4,5-Tri-O-galloylshikimic acid 188977-23-3
3,4-Di-O-galloylshikimic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FRP (Properties); BIOL (Biological study)
(lignans and tannins as inhibitors of viral reverse transcriptase and human DNA polymerase-α: QSAR anal. and mol. modeling)

RN 86687-37-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

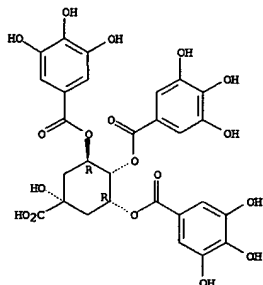


RN 94414-04-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

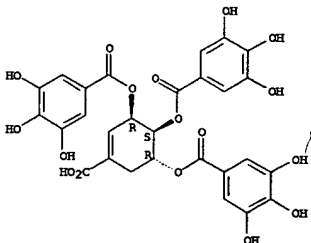
Absolute stereochemistry.

L3 ANSWER 25 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 129159-07-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-4-cyclohexene-1,2,3-triyl ester, [1R-(1a,2b,3b)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



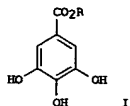
RN 188977-23-3 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,6R)-4-carboxy-6-hydroxy-3-cyclohexene-1,2-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

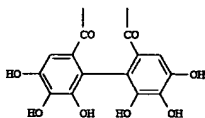
L3 ANSWER 26 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:315140 CAPLUS
 DOCUMENT NUMBER: 126:288106
 TITLE: NF-κB activation inhibitors, antiviral agents, and immunosuppressants containing gallic acid derivatives
 INVENTOR(S): Murase, Takatoshi; Hase, Tadashi; Tokimitsu, Ichiro
 PATENT ASSIGNEE(S): Kao Corp, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JPOKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09059151	A	19970304	JP 1995-215903	19950824
PRIORITY APPL. INFO.:			JP 1995-215903	19950824
OTHER SOURCE(S):		MARPAT 126:288106		
ED Entered STN: 16 May 1997				
GI				



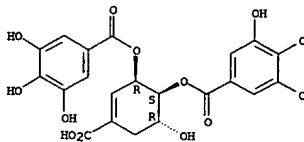
Q -



AB The NF-κB activation inhibitors and the antiviral agents contain ≥1 selected from gallic acid esters I [R = C1-24 linear or branched (hydroxy)alkyl, (hydroxy)alkenyl], (b) tannins containing galloyl group, and (c) tannins having hexahydroxydiphenoyl group Q as active ingredients. Immunosuppressants containing (b) and/or (c) as active ingredients are also claimed. The inhibitors are useful for treatment of infections with viruses, e.g. HIV, HTLV-I, CMV, and adenovirus, whose transcription is promoted by NF-κB. Octyl gallate showed 65% inhibition against IL-1α-stimulated activation of NF-κB in cultured vascular epithelial cells. Formulations containing gallate esters or 1,2,3,6-tetragalloylglucose are also given.

17 188977-23-3

L3 ANSWER 25 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

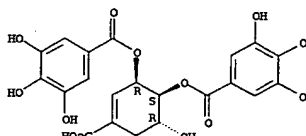


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 26 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NF-κB activation inhibitors, antiviral agents, and immunosuppressants contg. gallic acid esters or tannins)
 RN 188977-23-3 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1S,2S,6R)-4-carboxy-6-hydroxy-3-cyclohexene-1,2-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 27 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1997:276958 CAPLUS
 DOCUMENT NUMBER: 126:255293

TITLE: Maillard reaction inhibitors containing tannin (hydrolyzates), and skin-lightening and antiaging cosmetics containing them
 INVENTOR(S): Uchino, Keiichi; Myashita, Rumiko; Mizuno, Takashi
 PATENT ASSIGNEE(S): Nippon Flour Mills, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKKKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09040519	A	19970210	JP 1995-189950	19950726
PRIORITY APPL. INFO.: JP 1995-189950 19950726				

ED Entered STN: 30 Apr 1997

AB Cosmetics contain hydrolyzable tannin and/or its hydrolyzates as Maillard reaction inhibitors. Tannic acid at 100 µg/mL completely suppressed Maillard reaction between lysozyme and fructose. A tannic acid-containing skin-lightening cream was formulated.

IT 99745-62-7P 188443-24-5P

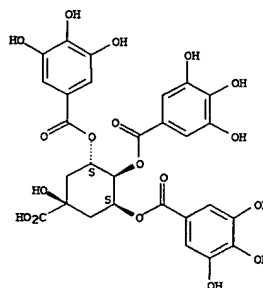
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); FNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (skin-lightening and antiaging cosmetics containing tannin (hydrolyzates) as Maillard reaction inhibitors)

RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

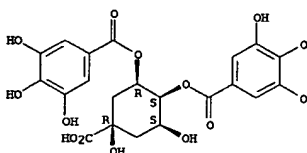
L3 ANSWER 27 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 188443-24-5 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester, [1R-(1a,2a,3a,5a)]- (9CI)
 (CA INDEX NAME)

Relative stereochemistry.



L3 ANSWER 28 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:476586 CAPLUS

DOCUMENT NUMBER: 125:230320

TITLE: HIV-inhibitory natural products. Part 27.
 HIV-inhibitory gallotannins from *Lepidobotrys stauditi*
 Bokesch, Heidi R.; McKee, Tammy C.; Currens, Michael J.; Gulakowski, Robert J.; McMahon, James B.;

CORPORATE SOURCE: Cardellina, John H.; Boyd, Michael R.
 Lab. Drug Discovery Res. Dev., National Cancer Inst.,
 Frederick, MD, 21702, USA

SOURCE: Natural Product Letters (1996), 8(2), 133-136
 CODEN: NPLEEF; ISSN: 1057-5634

PUBLISHER: Harwood

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 10 Aug 1996

AB Three galloylquinic acids, 1,3,4,5-tetra-O-galloylquinic acid (I), 3,4,5-tri-O-galloylquinic acid, and Me 3,4,5-tri-O-galloylquinic acid were isolated from the stem bark of the monotypic plant *L. stauditi*. I protected target cells from the cytopathic effects of HIV-1 and HIV-2 and also exhibited potent inhibition of cellular RNA polymerases, as well as of the reverse transcriptases of HIV-1 and HIV-2, but not of other retroviruses tested.

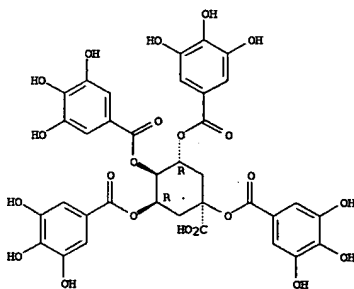
IT 123166-70-1

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (HIV-inhibitory gallotannins from *Lepidobotrys stauditi*)

RN 123166-70-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 94414-04-7 125369-71-3

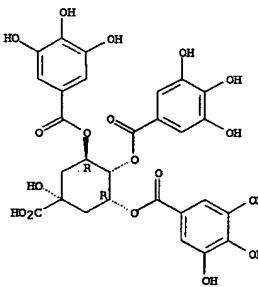
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (HIV-inhibitory gallotannins from *Lepidobotrys stauditi*)

L3 ANSWER 28 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 94414-04-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

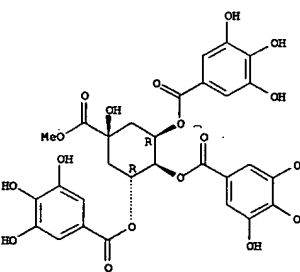
Absolute stereochemistry.



RN 125369-71-3 CAPLUS

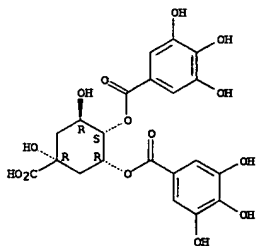
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-hydroxy-5-(methoxycarbonyl)-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 29 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1996:255355 CAPLUS
 DOCUMENT NUMBER: 124:312278
 TITLE: 1,3-di-O-galloylquinic acid from *Guiera senegalensis*
 AUTHOR(S): Bouchet, Nathalie; Levesque, Joel; Blond, Alain; Bodo, Bernard; Pousset, Jean-Louis
 CORPORATE SOURCE: Laboratoire Pharmacognosie, Faculté Médecine Pharmacie, Poitiers, 86005, Fr.
 SOURCE: Phytochemistry (1996), 42(1), 189-90
 CODEN: PHYCAS; ISSN: 0031-9422
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 01 May 1996
 AB A new polyphenol, 1,3-di-O-galloylquinic acid, and the known quinic acid gallates, 3-O-, 4-O-, 5-O-, 3,4-di-O-, 4,5-di-O-, 3,5-di-O-, 3,4,5-tri-O- and 1,3,4,5-tetra-O-galloylquinic acids were isolated from the galls of *Guiera senegalensis*.
 IT 53505-97-8 86687-37-8, 3,4-Di-O-galloylquinic acid
 99745-62-7, 3,4,5-Tri-O-galloylquinic acid 144300-48-1
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (galloylquinic acid from *Guiera senegalensis*)
 RN 53505-97-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

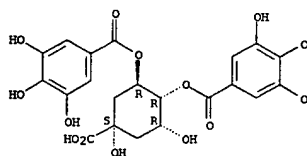
Absolute stereochemistry.



RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

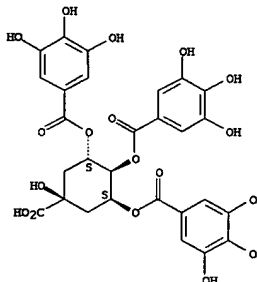
Absolute stereochemistry.

L3 ANSWER 29 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

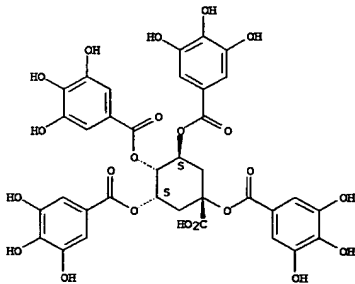
Relative stereochemistry.



RN 144300-48-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

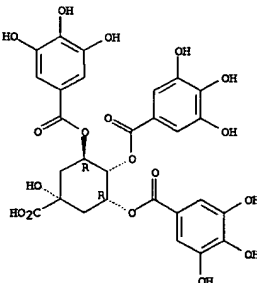
L3 ANSWER 29 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L3 ANSWER 30 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

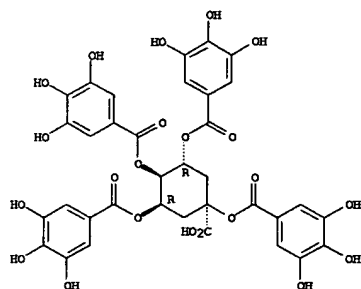
ACCESSION NUMBER: 1995:1005879 CAPLUS
 DOCUMENT NUMBER: 124:202851
 TITLE: On the synthesis and chiroptical properties of the tri- and tetragalloylquinic acids
 AUTHOR(S): Altmann, R.; Falk, H.
 CORPORATE SOURCE: Institut fuer Chemie, Johannes Kepler Universitaet Linz, Linz, Austria
 SOURCE: Monatshefte fuer Chemie (1995), 126(11), 1225-32
 CODEN: MOCHB7; ISSN: 0026-9247
 PUBLISHER: Springer
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 124:202851
 ED Entered STN: 29 Dec 1995
 AB A synthesis of the potential pharmaceutical agents 3,4,5-trigalloylquinic acid and 1,3,4,5-tetragalloylquinic acid is described. It involves three steps starting from com. available quinic acid and provides overall yields of about 15%. The acylation of benzyl or 4-nitrobenzyl quinate with tribenzylgalloyl chloride is the key step. It leads selectively to the triacyl product in the case of benzyl quinate and can be either stopped at the triacyl stage or driven to the tetraacyl derivative in the case of the 4-nitrobenzyl quinate. From the chiroptical properties of the two compds. their stereochem. was derived by means of the benzoate rule.
 IT 94414-04-7P 123166-70-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and chiroptical properties of the tri- and tetra-galloylquinic acids from quinic acid)
 RN 94414-04-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 123166-70-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

L3 ANSWER 30 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Absolute stereochemistry.



L3 ANSWER 31 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:994852 CAPLUS
DOCUMENT NUMBER: 124:76489
TITLE: Bioassay for reverse transcriptase inhibitors
INVENTOR(S): Fridland, Arnold; Robbins, Brian L.
PATENT ASSIGNEE(S): St. Jude Children's Research Hospital, USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9524507	A1	19950914	WO 1995-US3036	19950309
US 5576177	A	19961119	US 1994-208109	19940309
CA 2120096	A1	19950910	CA 1994-2120096	19940328
			US 1994-208109	A 19940309

PRIORITY APPLN. INFO.:

ED Entered STN: 22 Dec 1995

AB The present invention relates generally to methods and kits for determining the

bodily level of a reverse transcriptase inhibitor or therapeutic compound or metabolite thereof used to treat retrovirus infection, particularly HIV-1 infection. Included is e.g. determination of zidovudine triphosphate levels in

peripheral blood mononuclear cells in vitro.

IT 99745-62-7, 3,4,5-Tri-O-galloylquinic acid 147920-67-0

RI: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

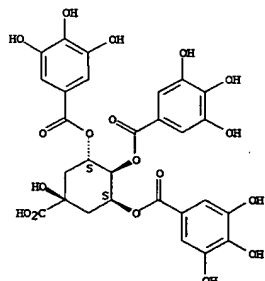
(reverse transcriptase inhibitor bioassay)

RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2e,3R,5e)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 31 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 147920-67-0 CAPLUS

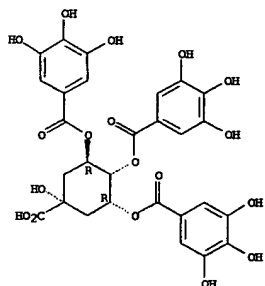
CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1a,2a,3b,5a)]- (9CI) (CA INDEX NAME)

CM 1

CRN 94414-04-7

CMF C28 H24 O18

Absolute stereochemistry.

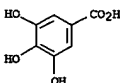


CM 2

L3 ANSWER 31 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 149-91-7

CMF C7 H6 O5



L3 ANSWER 32 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:751189 CAPLUS

DOCUMENT NUMBER: 123:217713

TITLE: Differential inhibition of reverse transcriptase and cellular DNA polymerase- α activities by lignans isolated from Chinese herbs, *Phyllanthus myrtifolius* Moon, and tannins from *Lonicera japonica* Thunb and *Castanopsis hystrix* Chang, Chia-Wen; Lin, Mei-Tsu; Lee, Shuei-Sheng; Liu, Karin C. S. Chen; Hsu, Feng-Lin; Lin, Jung-Yaw

AUTHOR(S):

CORPORATE SOURCE: Institute of Biochemistry, College of Medicine, National Taiwan University, 1 Jen Ai Rd., Sec. 1, Taipei, 10018, Taiwan

SOURCE: Antiviral Research (1995), 27(4), 367-74

CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 23 Aug 1995

AB Two lignans, phyllanthycin B and retrojusticidin B isolated from *Phyllanthus myrtifolius* Moon have been demonstrated to have a strong inhibitory effect on human immunodeficiency virus-1 reverse transcriptase activity (HIV-1 RT), but much less inhibitory effect on human DNA polymerase- α (HDNAP- α) activity. Fifty percent inhibitory concns. of phyllanthycin B and retrojusticidin B were determined to be 3.5 and 5.5 μ M for HIV-1 RT, and 289 and 989 μ M for HDNAP- α , resp. The mode of inhibition was non-competitive inhibition with respect to template-primer and triphosphate substrate. Several tannins such as caffeoylquinates (CQs) isolated from *Lonicera japonica* Thunb, galloylquinates (GQs) and galloylshikimates (GSs) purified from *Castanopsis hystrix* were shown to have a much less selective inhibitory effect on HIV-1 RT.

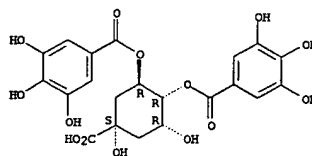
IT 86687-37-8, 3,4-Di-O-galloylquinic acid 95753-51-8
99745-62-7, 3,4,5-Tri-O-galloylquinic acid 129159-07-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(differential inhibition of HIV-1 reverse transcriptase and human cellular DNA polymerase- α activities by lignans isolated from Chinese herb *Phyllanthus myrtifolius* Moon and tannins from *Lonicera japonica* Thunb and *Castanopsis hystrix*)

RN 86687-37-8 CAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

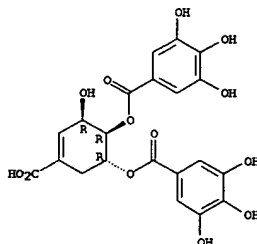
L3 ANSWER 32 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 95753-51-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-3-hydroxy-4-cyclohexene-1,2-diyl ester, [1R-(1 α ,2 β ,3 β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

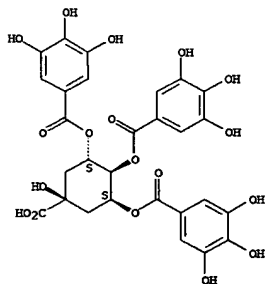


RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

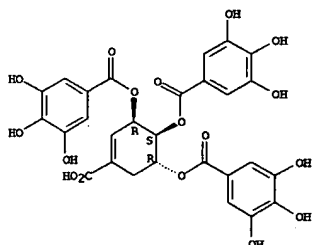
L3 ANSWER 32 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 129159-07-5 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-4-cyclohexene-1,2,3-triyl ester, [1R-(1 α ,2 β ,3 β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 33 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:445600 CAPLUS

DOCUMENT NUMBER: 122:281420

TITLE: The inhibitory effect of tannins on lipid peroxidation of rat heart mitochondria

AUTHOR(S): Hong, Chuang-Ye; Wang, Chein-Ping; Huang, Shiang-Suor

CORPORATE SOURCE: Hsu, Feng-Lin

Institute Traditional Medicine, Yang-Ming University, Taipei, Taiwan

SOURCE: Journal of Pharmacy and Pharmacology (1995), 47(2), 138-42

CODEN: JPPHAB; ISSN: 0022-3573

PUBLISHER: Royal Pharmaceutical Society of Great Britain

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 28 Mar 1995

AB We induced lipid peroxidn. in rat heart mitochondria with ferrous sulfate (FeSO₄) and compared the inhibitory effect of various tannins on the peroxidn. Oxygen consumption and malondialdehyde (MDA) formation were used to quantitate the amount of lipid peroxidn., and the free radical scavenger activity of tannins was measured with a diphenyl-p-picrylhydrazyl (DPPH) method. Of 25 tannins and related compds. tested, catechin benzylthioether and procyanidin B-2 benzylthioether were the most potent in inhibiting lipid peroxidn., with inhibitory effects stronger than that of trolox, a water soluble analog of vitamin E. The concns.

(IC₅₀) required for catechin benzylthioether and procyanidin B-2 benzylthioether to inhibit oxygen consumption to 50% of control values were 0.85 and 2.0 μ M, resp., while their IC₅₀ values from the inhibition of MDA formation were 0.9 and 1.70 μ M, resp. The IC₅₀ values for catechin and procyanidin B-2 to inhibit oxygen consumption were 34.0 and 11.0 μ M. Both compds. were less potent than their benzylthioether derivs. However, the ability of catechin and procyanidin B-2 to scavenge DPPH were similar to that of their benzylthioether derivs. We conclude that conjugation with a benzylthioether group enhances the inhibitory effect of tannins on lipid peroxidn., and that the mechanism is not an increase in its scavenger activity.

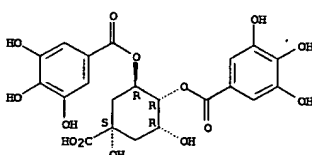
IT 86687-37-8, 3,4-Di-O-galloyl quinic acid
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(inhibitory effect of tannins on lipid peroxidn. of heart mitochondria)

RN 86687-37-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 33 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

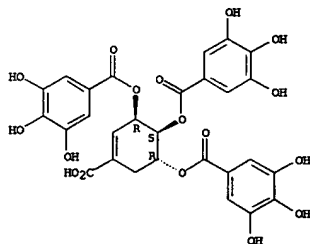
L3 ANSWER 34 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1994:450109 CAPLUS
 DOCUMENT NUMBER: 121:50109
 TITLE: Tannin-metal(III) ion complexes, their preparation, and their pharmaceutical use
 INVENTOR(S): Klesgen de Richter, Renaud; Maurel, Jean Claude
 PATENT ASSIGNEE(S): I.R.2.M. Societe en Nom Collectif, Fr.
 SOURCE: Fr. Demande, 41 pp.
 CODEN: FRXMBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2695390	A1	19940311	FR 1992-10770	19920909
FR 2695390	B1	19941125		
WO 9406809	A2	19940331	WO 1993-FR863	19930909
WO 9406809	A3	19940428		
W: CA, JP, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 659189	A1	19950628	EP 1993-919434	19930909
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			FR 1992-10770	A 19920909
			WO 1993-FR863	W 19930909

ED Entered STN: 06 Aug 1994
 AB Complexes of metal(III) ions with a tannin or tannin mixture are prepared and used for treatment of diabetes and complications associated with this disease. A large number of V(III) complexes with tannin-containing exts. of various plants, or with specific tannins, were prepared and tested for hypoglycemic activity in diabetic rats.
 IT 129159-07-50, complexes with vanadium(III)
 RL: BIOL (Biological study)
 (for diabetes treatment)
 RN 129159-07-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-4-cyclohexene-1,2,3-triyl ester, [1R-(1e,2e,3e)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

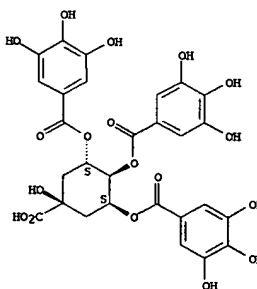
L3 ANSWER 34 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L3 ANSWER 35 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1994:315207 CAPLUS
 DOCUMENT NUMBER: 120:315207
 TITLE: Inhibition of HIV infection by caffeoylquinic acid derivatives
 AUTHOR(S): Mahmood, N.; Moore, P. S.; De Tommasi, N.; De Simone, F.; Colman, S.; Hay, A. J.; Pizzo, C.
 CORPORATE SOURCE: Collaborative Cent., MRC, London, NW7 1AD, UK
 SOURCE: Antiviral Chemistry & Chemotherapy (1993), 4(4), 235-40
 CODEN: ACCHEH; ISSN: 0956-3202
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 25 Jun 1994
 AB The caffeoylquinic acids 3,4,5-tri-O-caffeoylquinic acid (I) and 4,5-di-O-caffeoylquinic acid (II), as well as caffeic acid and synapic acid were isolated from the plant Securidaca longipedunculata (Polygalaceae). I exhibited a greater selective inhibition of HIV replication than II, which had an anti-HIV activity similar to that of 3,4,5-tri-O-galloylquinic acid, isolated from Guiera senegalensis (Combretaceae); caffeic acid and synapic acid were ineffective, and the structurally related compound rosmarinic acid had only slight anti-HIV activity. Studies of the actions of these compds. suggested that their inhibition of the viral reverse transcriptase in vitro is nonspecific and that they act by specific binding to gp120, which prevents its interaction with CD4 on T-lymphocytes and thus inactivates virus infectivity.
 IT 99745-62-7
 RL: BIOL (Biological study)
 (human immunodeficiency virus inhibition by)
 RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2e,3R,5e)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

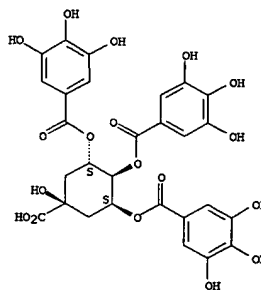
Relative stereochemistry.



L3 ANSWER 36 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1994:124105 CAPLUS
 DOCUMENT NUMBER: 120:124105
 TITLE: Tannins as potent inhibitors of DNA topoisomerase II in vitro
 AUTHOR(S): Kashiwada, Yoshiki; Nonaka, Genichiro; Nishioka, Itsuo; Lee, Kenneth Jiann Hung; Bori, Ibrahim; Fukushima, Yasuhiro; Bastow, Kenneth F.; Lee, Kuo Hsiung
 CORPORATE SOURCE: Nat. Prod. Lab., Kyushu Univ., Fukuoka, 812, Japan
 SOURCE: Journal of Pharmaceutical Sciences (1993), 82(5), 487-92
 CODEN: JPMSAE; ISSN: 0022-3549
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 19 Mar 1994
 AB Fifty-two out of 60 tannins, including gallo-, ellagi, condensed, and complex tannins, are inhibitors of human DNA topoisomerase II in vitro. Thirty-six compds. that completely inhibited enzyme activity at a concentration of 500 nM or less, as assessed by ATP-dependent unknotting of P4 phage DNA, were at least 100-fold more potent than the clin. useful antitumor agent etoposide (VP-16). Relative inhibitory activity was primarily related to the number of phenolic hydroxyl groups (galloyl and hexahydroxydiphenoyl moieties) found in the active structures, with more groups generally conferring increased potencies. Unlike VP-16 and some DNA intercalative agents that stabilize the topoisomerase II-DNA cleavage intermediate, none of the active compds. induced protein-linked DNA breaks in cultured cells. Some of the tannins reduced VP-16-induced protein-linked DNA breaks by 20% or more, but one of these compds., (-)-epicatechin, was not an inhibitor in vitro. These data suggest that some tannins, such as sanguin H-6, that are potent inhibitors of catalytic double DNA-strand passage in vitro may target intracellular enzyme activity in a similar fashion to known poisons that interfere with formation of the enzyme-DNA covalent intermediate.
 IT 99745-62-7, 3,4,5-Tri-O-galloylquinic acid 144300-48-1
 145108-20-9 145108-21-0
 RL: BIOL (Biological study)
 (DNA topoisomerase II-inhibiting activity of, structure in relation to)
 RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

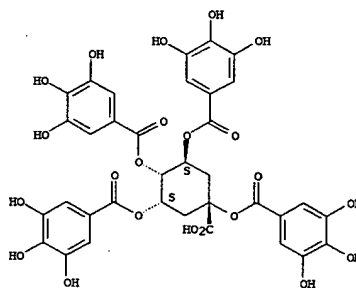
Relative stereochemistry.

L3 ANSWER 36 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



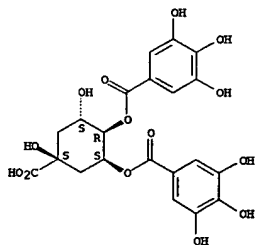
RN 144300-48-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 145108-20-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester, rel- (9CI) (CA INDEX NAME)

L3 ANSWER 36 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 Relative stereochemistry.



RN 145108-21-0 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,4S,6S)-4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

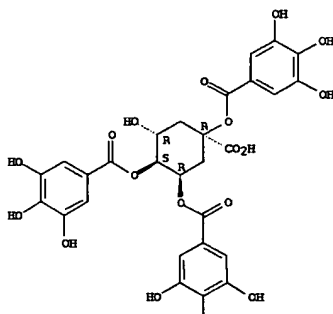
Relative stereochemistry.

L3 ANSWER 36 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



PAGE 1-A



L3 ANSWER 37 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1993:424645 CAPLUS

DOCUMENT NUMBER: 119:24645

TITLE: Tetragalloylquinic acid, the major antiasthmatic principle of Galphimia glauca
 AUTHOR(S): Naszmelyi, A.; Kreher, B.; Mueller, A.; Dorsch, W.; Wagner, H.

CORPORATE SOURCE: Cent. Res. Inst. Chem., Hung. Acad. Sci., Budapest, H-1025, Hung.

SOURCE: Planta Medica (1993), 59(2), 164-7
 CODEN: PLMEAA; ISSN: 0032-0943

DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 24 Jul 1993

AB In the search for antiasthmatic principles in plant drugs, a bioguided fractionation of an alc. extract of Galphimia glauca was performed using a plethysmog. in vivo model. Tetragalloylquinic acid (G1), which was found together with other compds. (gallic acid, Me gallate, ellagic acid, and flavonoid acylglycosides), showed the highest activity against bronchial hyperactivity and allergic reactions. Using mass and NMR spectroscopy in combination with energy calcns., the structure G1 was elucidated as tetra-O-galloylquinic acid. Depending on the solvent used, the quinic acid skeleton can occupy a fixed conformation or several interconverting ones on the NMR time scale.

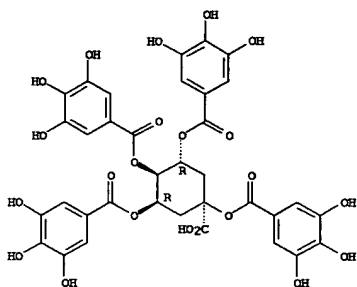
IT 123166-70-1

RL: BIOL (Biological study)
 (from Galphimia glauca, isolation and conformation and antiasthmatic activity of)

RN 123166-70-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5e)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 38 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:400314 CAPLUS

DOCUMENT NUMBER: 119:314

TITLE: Anti-AIDS agents. 8. HIV and reverse transcriptase inhibition by tannins
 AUTHOR(S): Kilukkie, Robert E.; Kashiwada, Yoshiki; Nonaka, Genichiro; Nishioaka, Itsuo; Bodner, Anne J.; Cheng, Yung Chi; Lee, Kuo Hsiung

CORPORATE SOURCE: Cambridge Biotech Corp., Rockville, MD, 20850, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1992), 2(12), 1529-34

CODEN: BMLCER; ISSN: 0960-894X

DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 10 Jul 1993

AB Further evaluation of tannins as anti-HIV agents indicates that these compds. inhibited HIV replication only slightly in the absence of toxicity (therapeutic index ≤ 5). In addition, no correlation was found between inhibition of reverse transcriptase and of HIV in cell culture.

IT 94414-04-7 125637-30-1 147920-67-0

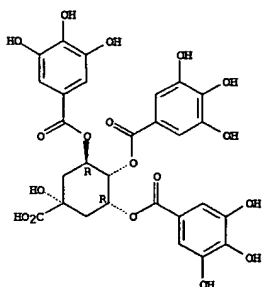
147920-68-1

RL: BIOL (Biological study)
 (HIV and reverse transcriptase inhibition by, anti-AIDS activity in relation to)

RN 94414-04-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5e)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125637-30-1 CAPLUS

CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 4-carboxy-4-hydroxy-2,6-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1S-(1a,2a,4a,6b)]- (9CI) (CA INDEX NAME)

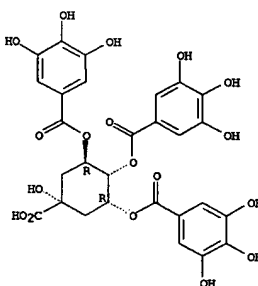
CM 1

CRN 94414-04-7

L3 ANSWER 37 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L3 ANSWER 38 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 CMF C28 H24 O18

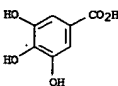
Absolute stereochemistry.



CM 2

CRN 149-91-7

CMF C7 H6 O5



RN 147920-67-0 CAPLUS

CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1a,2a,3b,5a)]- (9CI) (CA INDEX NAME)

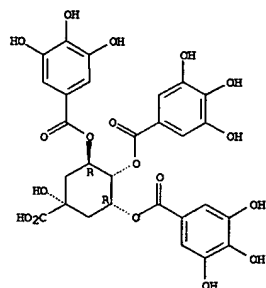
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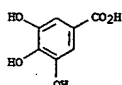
CMF C28 H24 O18

Absolute stereochemistry.

L3 ANSWER 38 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

CRN 149-91-7
CMF C7 H6 O5

RN 147920-68-1 CAPLUS

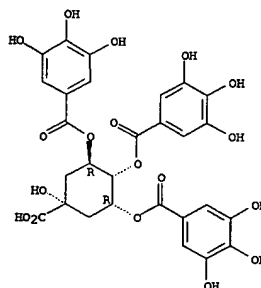
CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1a,2b,3b,5b)]- (9CI) (CA INDEX NAME)

CM 1

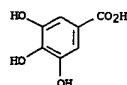
CRN 94414-04-7
CMF C28 H24 O18

Absolute stereochemistry.

L3 ANSWER 38 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

CRN 149-91-7
CMF C7 H6 O5

L3 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L3 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:109682 CAPLUS

DOCUMENT NUMBER: 118:109682

TITLE: Pharmaceuticals containing a gallic acid derivative and/or quercetin and method for isolating them
Wagner, Hildebert; Dorsch, Walter
Plantamed Arzneimittel G.m.b.H., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

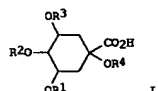
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4106026	A1	19920827	DE 1991-4106026	19910226
DE 4106026	C2	19930826		
EP 501205	A1	19920902	EP 1992-102061	19920207
EP 501205	B1	19950524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
US 5260335	A	19931109	US 1992-837840	19920218
JP 05213744	A	19930824	JP 1992-39862	19920226
JP 3114895	B2	20001204		

PRIORITY APPL. INFO.:

ED Entered STN: 19 Mar 1993

GI



AB I (R1-R3 = H, galloyl, digalloyl; R4 = H, galloyl) along with gallic acid, its Me ester, and quercetin, can be used as pharmaceuticals for treating inflammation. Thus, tetragalloylquinic acid (II) was isolated from Galphimia glauca along with other I. II showed the highest activity at 5 mg/kg against allergy (bronchial reactions).

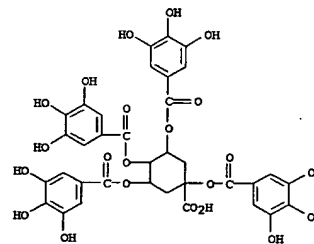
IT 106195-91-9 144300-48-1 145120-36-1

145928-79-6 146074-63-7
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(of Galphimia glauca, allergy-inhibiting activity of)

RN 106195-91-9 CAPLUS

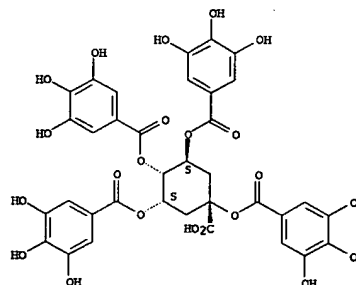
CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)



RN 144300-48-1 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

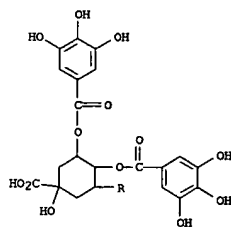


RN 145120-36-1 CAPLUS

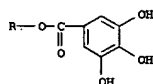
CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

L3 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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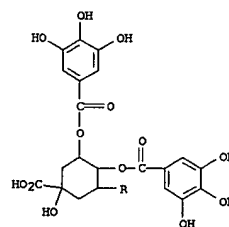
RN 145928-79-6 CAPLUS
 CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 4-carboxy-4-hydroxy-2,6-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester (9CI) (CA INDEX NAME)

CM 1

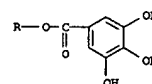
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 CMF C28 H24 O18

L3 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

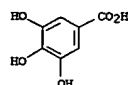


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CM 2

CRN 149-91-7
 CMF C7 H6 O5



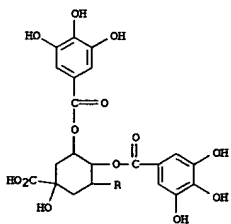
RN 146074-63-7 CAPLUS
 CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester (9CI) (CA INDEX NAME)

CM 1

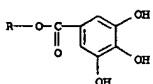
CRN 145120-36-1
 CMF C28 H24 O18

L3 ANSWER 39 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

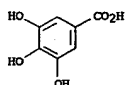


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CM 2

CRN 149-91-7
 CMF C7 H6 O5



L3 ANSWER 40 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:93861 CAPLUS

DOCUMENT NUMBER: 118:93861

TITLE: Antitumor agents, 129. Tannins and related compounds as selective cytotoxic agents

AUTHOR(S): Kashiwada, Yoshiki; Nonaka, Genchiro; Nishioka, Itsuo; Chang, Jee Jang; Lee, Kuo Hsiung

CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA

SOURCE: Journal of Natural Products (1992), 55(8), 1033-43

CODEN: JNPRDF; ISSN: 0163-3864

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 19 Mar 1993

AB Fifty-seven tannins and related compds., including gallotannins, ellagitannins, and condensed and complex tannins, were evaluated for their cytotoxicities against human tumor cell lines, including malignant melanoma, lung carcinoma, ileocecal adenocarcinoma, epidermoid carcinoma, malignant melanoma, and medulloblastoma cell lines. Among them, chebulagic acid, geraniin, sanguin H-11, 4,5-di-O-galloylquinic acid, 1,3,4,5-tetra-O-galloylquinic acid, 1(β)-O-galloylpedunculagin, furosin, castalagin, sanguin H-2, vesicalagin, grandinin, phyllraeoidin A, (-)-epicatechin 3-O-gallate, cinnamtannin B2, and acutissimin A exhibited moderate selective cytotoxicity against PRMI-7951 melanoma cells with ED50 values in the range of 0.1-0.8 μg/mL. Selective cytotoxicities against the melanoma cells were also observed for strictinin, pedunculagin, eugenin, elaeocarpusin, punicaortein C, casuarinin, sanguin H-6, procyanidin B-2,3,3'-di-O-gallate, procyanidin C-13,3',3''-tri-O-gallate, and cinnamtannin B1 with ED50 values of 1-4 μg/mL. All of the tannins were found to be inactive (>10 μg/mL) against lung carcinoma (A-549), ileocecal adenocarcinoma (HCT-8), epidermoid carcinoma of nasopharynx (KB), and medulloblastoma (TE-671) tumor cells.

IT 99745-62-7 144300-48-1 145108-20-9

145108-21-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

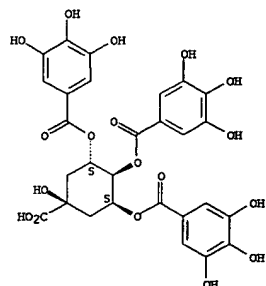
(Antitumor activity of)

RN 99745-62-7 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

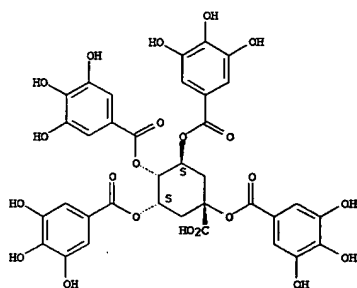
Relative stereochemistry.

L3 ANSWER 40 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 144300-48-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

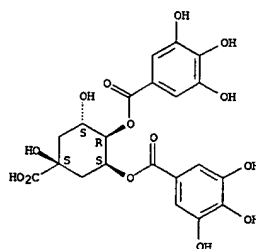


RN 145108-20-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester, rel- (9CI) (CA INDEX NAME)

L3 ANSWER 40 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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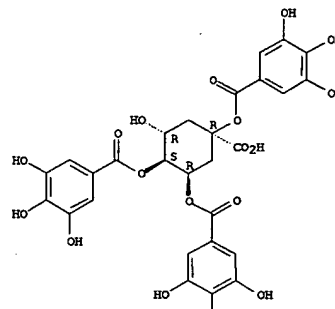
OH

L3 ANSWER 40 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Relative stereochemistry.

RN 145108-21-0 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,4S,6S)-4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A

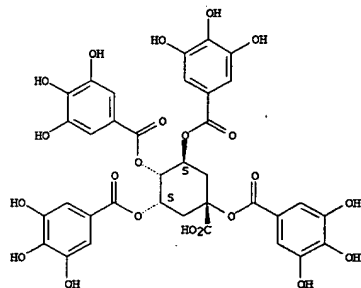


L3 ANSWER 41 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:604931 CAPLUS
 DOCUMENT NUMBER: 117:204931
 TITLE: Antiasthmatic effects of Galphimia glauca, gallic Acid, and related compounds prevent allergen- and platelet-activating factor-induced bronchial obstruction as well as bronchial hyperreactivity in guinea pigs
 AUTHOR(S): Dorisch, W.; Bittinger, M.; Kaas, A.; Mueller, A.; Kreher, B.; Wagner, H.
 CORPORATE SOURCE: Child. Hosp., Johannes Gutenberg Univ., Mainz, D-W-6500, Germany
 SOURCE: International Archives of Allergy and Immunology (1992), 97(1), 1-7
 CODEN: IAAIEG; ISSN: 1018-2438
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 28 Nov 1992
 AB A methanolic extract from Galphimia glauca (320 mg/kg, orally) inhibited acute bronchial reactions to allergen (ovalbumin, 10 mg/mL) and platelet-activating factor (PAF, 1 µg/mL) inhalation challenges, but not to histamine or acetylcholine in spontaneously breathing guinea pigs. Furthermore, the PAF-induced bronchial hyperreactivity was markedly reduced. Gallic acid and related compds. as well as the flavonoid, quercetin, were identified as active compds. Gallic acid, Me gallate and quercetin showed significant effects after a single oral dose of 45 mg/kg, whereas tetragalloyl quinic acid showed effects after a dose of 5 mg/kg. Continuous treatment of the animals with one certain fraction (GG II, 3 days, 3 + 2 mg/kg) containing all active compds. reduced allergen- and PAF-induced bronchial reactions by more than 70%.
 IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antiasthmatic activity of, from Galphimia glauca)
 RN 144300-48-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 41 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

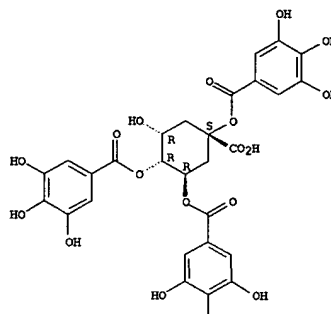


L3 ANSWER 42 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:503646 CAPLUS
 DOCUMENT NUMBER: 117:103646
 TITLE: Prevention of binding of rgp120 by anti-HIV active tannins
 AUTHOR(S): Weaver, James L.; Pine, P. Scott; Dutschman, Ginger; Cheng, Yungchi; Lee, Kuo Hsing; Aszalos, Adorjan
 CORPORATE SOURCE: Div. Res. Test., Food and Drug Adm., Washington, DC, 20204, USA
 SOURCE: Biochemical Pharmacology (1992), 43(11), 2479-80
 CODEN: BCPA6; ISSN: 0006-2952
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 20 Sep 1992
 AB Several tannins with anti-HIV activity have been described previously. The tannins chebulinic acid and punicalin are able to block the binding of HIV rgp120 to CD4. These compds. are not toxic to stimulated human peripheral blood lymphocytes at concns. ten times above their maximal effective concentration
 IT 110082-89-8
 RL: BIOL (Biological study)
 (rgp120 of HIV-1 binding to CD4 inhibition by, AIDS therapy in relation to)
 RN 110082-89-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, [1R-(1a,2b,4a,6a)]- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

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L3 ANSWER 42 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L3 ANSWER 43 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:414409 CAPLUS
 DOCUMENT NUMBER: 117:14409
 TITLE: Aldose reductase inhibitors containing sulfuric acid esters of phenolic hydroxy compounds
 INVENTOR(S): Matsuo, Toshiharu; Shoji, Toshikatsu; Iwamoto, Masayasu; Uchino, Kei-jiro
 PATENT ASSIGNEE(S): Nippon Flour Mills Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03232851	A	19911016	JP 1990-142948	19900531
PRIORITY APPLN. INFO.:				
			JP 1989-337741	A1 19891226
			JP 1989-337742	A1 19891226

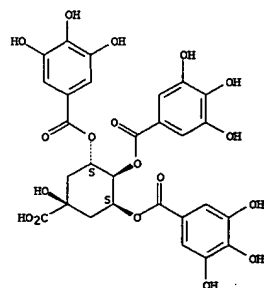
ED Entered STN: 11 Jul 1992
 AB An aldose reductase inhibitor contains a sulfuric acid ester of tannic acid, pentagalloylglucose, rutin, quercetin, ellagic acid, epicatechin, 3,4-digalloylquinic acid, or 3,4,5-trigalloylquinic acid. These sulfate esters are less toxic than the parent compds., show high H₂O-solubility and stability in an aqueous solution, are useful for treatment of diabetes complications such as cataract, retinopathy, kidney diseases, and nerve disturbance. Rutin sulfuric acid ester (I) containing 13.3% S at 10 µg/mL inhibited aldose reductase by 85% compared to 74% for rutin. When HL-60 cells 4.5 × 10⁴/mL were cultured in a medium containing 1 300 µg/mL, the cell count number was 9.1 × 10⁵/mL after 3 days compared to 6.5 × 10⁵/mL for rutin.
 IT 139203-27-3
 RL: BIOL (Biological study)
 (aldose reductase inhibitor)
 RN 139203-27-3 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, hydrogen sulfate, (1a,2a,3b,5a,alp ha.)- (9CI) (CA INDEX NAME)

CN 1

CRN 99745-62-7
 CMF C28 H24 O18

Relative stereochemistry.

L3 ANSWER 43 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

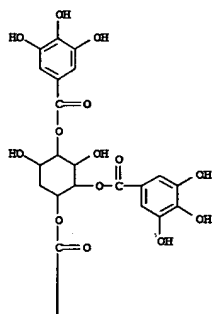
CRN 7664-93-9
CMP H2 O4 S

L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

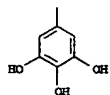
ACCESSION NUMBER: 1991:603117 CAPLUS
DOCUMENT NUMBER: 115:203117
TITLE: Comparative antibacterial activity of quercitol gallates
AUTHOR(S): Serit, Muney; Okubo, Tsutomu; Hagiwara, Nobuyuki; Kim, Mujo; Nonaka, Genichiro; Nishioka, Itsuo; Yamamoto, Takehiko
CORPORATE SOURCE: Cent. Res. Lab., Taiyo Kagaku Co., Ltd., Yokkaichi, 510, Japan
SOURCE: Agricultural and Biological Chemistry (1991), 55(7), 1893-4
CODEN: ABCHAG; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 15 Nov 1991
AB (+)-Protoquercitol gallates and scylloquercitol gallates were evaluated for their antibacterial activity against *Bacillus coagulans*, *B. brevis*, *Escherichia coli* and *Pseudomonas aeruginosa*. With one exception, all the compds. tested exhibited good activity. The effects of structure on activity are discussed.
IT 91431-96-8 91431-99-1 91465-75-7
107724-19-6 107794-84-3 107794-86-5
136378-57-9 136378-58-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (bactericidal activity of)
RN 91431-96-8 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 3,4,6-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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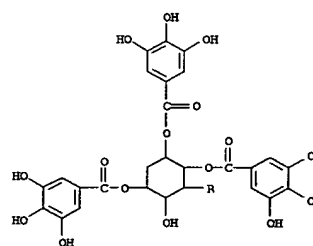
PAGE 2-A



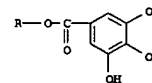
RN 91431-99-1 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 1,3,4,5-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

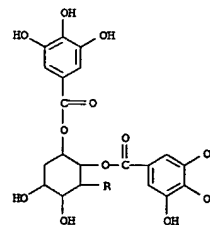


PAGE 2-A



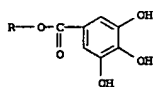
RN 91465-75-7 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 3,4,5-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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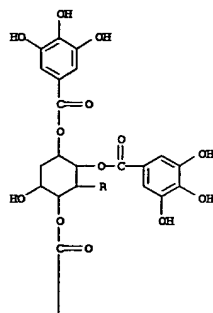


L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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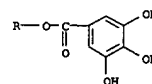
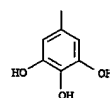
RN 107724-19-6 CAPLUS
 CN myo-Inositol, 2-deoxy-, 1,4,5,6-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)



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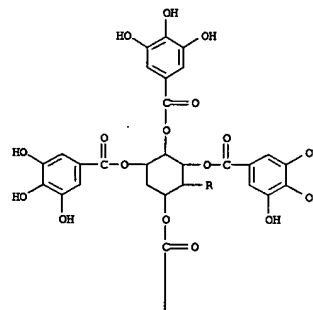
L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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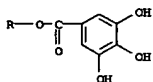
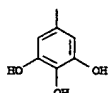
RN 107794-84-3 CAPLUS
 CN myo-Inositol, 2-deoxy-, pentakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

PAGE 1-A

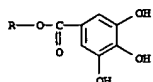
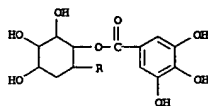


L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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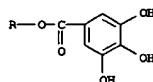
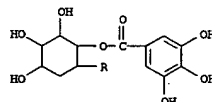


RN 107794-86-5 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 3,4-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)



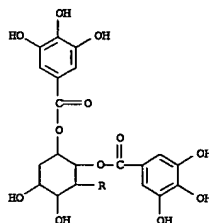
RN 136378-57-9 CAPLUS
 CN myo-Inositol, 2-deoxy-, 1,6-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 44 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

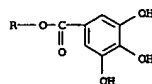


RN 136378-58-0 CAPLUS
 CN myo-Inositol, 2-deoxy-, 1,5,6-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1991:240605 CAPLUS
 DOCUMENT NUMBER: 114:240605
 TITLE: Inhibition of reverse transcriptase of human retroviruses with tannins
 INVENTOR(S): Nonaka, Genichiro; Lee, Kouhsung; Cheng, Yung Chi; Kilkuskie, Robert E.
 PATENT ASSIGNEE(S): University of North Carolina, USA; Biotech Research Laboratories, Inc.
 SOURCE: PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

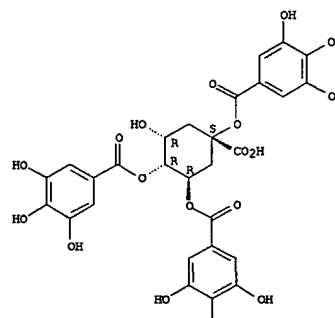
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9004968	A1	19900517	WO 1989-US4807	19891031
W: JP				
RU: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
CA 2001898	A1	19900430	CA 1989-2001898	19891031
PRIORITY APPL. INFO.:			US 1988-264558	A 19881031

ED Entered STN: 28 Jun 1991
 AB Reverse transcriptase (RT) of a human retrovirus is inhibited by tannins. 3,5-Di-O-galloyl-4-O-digalloylquinic acid (I) was isolated and purified along with 4 other galloylquinic acids from tannic acid. I at 100 µM inhibited human immunodeficiency virus (HIV) RT by 90%. I at 25 µM inhibited HIV-1 growth in H9 lymphocytes by 70%, uninfected H9 cell growth was inhibited 14%.
 IT 110082-89-8P 125637-30-1P 129159-07-5P
 133962-59-1P
 RL: PREP (Preparation)
 (purification and reverse transcription of human immunodeficiency virus inhibition with)
 RN 110082-89-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, [(1R-(1a,2p,4a,6a))- (9CI) (CA INDEX NAME)]

Absolute stereochemistry.

L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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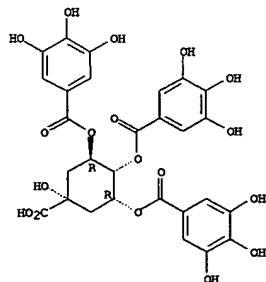
RN 125637-30-1 CAPLUS
 CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 4-carboxy-4-hydroxy-2,6-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [(1S-(1a,2a,4a,6p))- (9CI) (CA INDEX NAME)]

CM 1

CRN 94414-04-7
 CNF C28 H24 O18

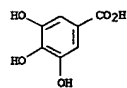
Absolute stereochemistry.

L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

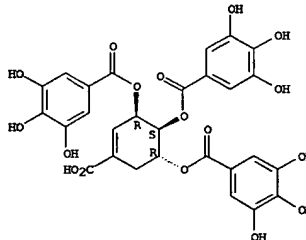
CRN 149-91-7
 CNF C7 H6 O5



RN 129159-07-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-4-cyclohexene-1,2,3-triyl ester, [(1R-(1a,2p,3p))- (9CI) (CA INDEX NAME)]

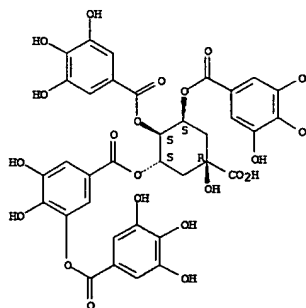
Absolute stereochemistry.

L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 133962-59-1 CAPLUS
 CN Benzoic acid, 3,4-dihydroxy-5-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [(1S-(1a,2p,3p,5p))- (9CI) (CA INDEX NAME)]

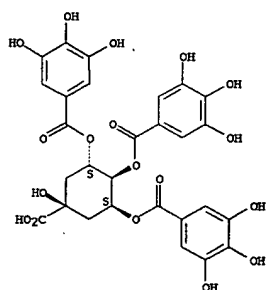
Absolute stereochemistry.



IT 99745-62-7P, 3,4,5-Tri-O-galloylquinic acid
 RL: PREP (Preparation)
 (purification of and reverse transcriptase of human immunodeficiency virus inhibition with)
 RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

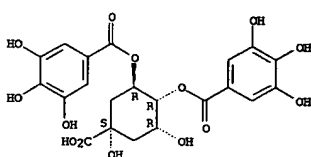
Relative stereochemistry.



IT 86687-37-8

RL: BIOL (Biological study)
 (reverse transcriptase of human immunodeficiency virus response to)
 RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 123166-70-1

RL: BIOL (Biological study)
 (reverse transcriptase of human retrovirus inhibition with)
 RN 123166-70-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 46 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:203549 CAPLUS
 DOCUMENT NUMBER: 114:203549
 TITLE: Polyphenols from leaves of Euphorbia hirta L
 AUTHOR(S): Chen, Ling
 CORPORATE SOURCE: Fujian Inst. Chin. Mater. Med., Fuzhou, 350003, Peop. Rep. China
 SOURCE: Zhongguo Zhongyao Zazhi (1991), 16(1), 38-9
 CODEN: ZZZAE3; ISSN: 1001-5302
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

ED Entered STN: 31 May 1991
 AB Six compds. gallic acid, quercitrin, myricitrin, 3,4-di-O-galloylquinic acid, 2,4,6-tri-O-galloyl-D-glucose, 1,2,3,4,6-penta-O-galloyl-β-D-glucose were isolated from leaves of Euphorbia hirta L.

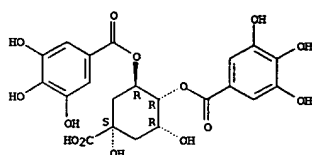
IT 86687-37-8, 3,4-Di-O-galloylquinic acid

RL: BIOL (Biological study)
 (from Euphorbia hirta)

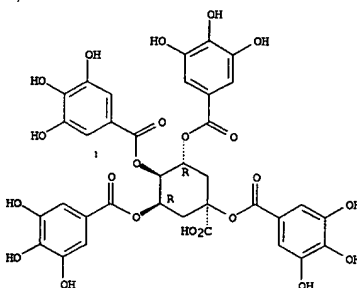
RN 86687-37-8 CAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 45 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L3 ANSWER 47 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:160586 CAPLUS
 DOCUMENT NUMBER: 114:160586
 TITLE: Antibacterial compounds from oak, Quercus acuta Thunb
 AUTHOR(S): Serit, Muney; Okubo, Tsutomu; Su, Rong Hui; Hagiwara, Nobuyuki; Kim, Mujo; Iwagawa, Tetsuo; Yamamoto, Takehiko
 CORPORATE SOURCE: Cent. Res. Lab., Taiyo Kagaku Co., Ltd., Yokkaichi, 510, Japan
 SOURCE: Agricultural and Biological Chemistry (1991), 55(1), 19-23
 CODEN: ABCBA6; ISSN: 0002-1369

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 03 May 1991

AB An ethanol extract of Quercus acuta trunk showed antibacterial activity against both gram-pos. and gram-neg. bacteria. The extract was sequentially partitioned with n-hexane, chloroform, Et acetate and water, and the highest activity was observed in the Et acetate fraction. Two active compds.

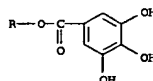
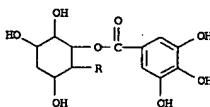
isolated from the Et acetate fraction were 4,5-di-O-galloyl (+)-protoquercitol and 3,5-di-O-galloyl protoquercitol, of which the former was the major active constituent. Gallic acid was also isolated from the same fraction, but it was not active.

IT 133201-11-3

RL: BIOL (Biological study)
 (antibacterial compound, from Quercus acuta)

RN 133201-11-3 CAPLUS

CN D-chiro-Inositol, 2-deoxy-, 4,5-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)



L3 ANSWER 49 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:78592 CAPIUS

DOCUMENT NUMBER: 114:78592

Tannins and related compounds. XCIV. Isolation and characterization of seven new hydrolyzable tannins from the leaves of *Macaranga tanarius* (L.) Muell. et Arg

AUTHOR(S): Lin, Jer Hwei; Nonaka, Genichiro; Nishioka, Itsuo
FAC. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1990), 38(5), 1218-23
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 09 Mar 1991

AB Seven new hydrolyzable tannins were isolated from the leaves of *M. tanarius* (Euphorbiaceae), together with 21 known tannins. On the basis of chemical and spectroscopic evidence, the structures of these new compounds

were established as 1,4-di-O-galloyl- α -D-glucopyranose, 3,4-di-O-galloyl-D-glucopyranose, galloylpunicafolin, galloylgeraniin, 1-O-galloyl-3-O-brevifolinicarbonyl- β -D-glucopyranose, 1,2,4-tri-O-galloyl-3,6-(S)-hexahydroxydiphenoyl- β -D-glucopyranose (macarangin) and 1,2,4-tri-O-galloyl-3,6-dehydrohexahydroxydiphenoyl- β -D-glucopyranose (tanarinin).

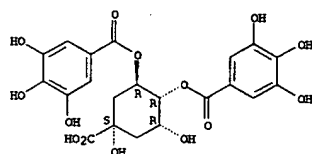
IT 86687-37-8, 3,4-Di-O-galloylquinic acid

RL: BIOL (Biological study)

RM 86687-37-8 CAPIUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 49 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN (Continued)

EtOAc to remove pyridine. The aq. layer was dialyzed 7 days against H₂O to give, after lyophilization, 323.4 mg Na salt of III sulfate (IV) (S content 13.0 wt.%). IV at 6 μ g/ml increased the survival rate of HTLV-III_B-infected MT-4 cells by 93% after 6 days of inoculation. Similarly prepd. were the Na salts of sulfated ellagic acid, (-)-epicatechin, (-)-epigallocatechin-3-gallate, 1,2,3,4,6-penta-O-galloyl- β -D-glucose, 3,4-digalloylquinic acid, and 3,4,5-trigalloylquinic acid.

IT 53505-97-8P 99745-62-7P

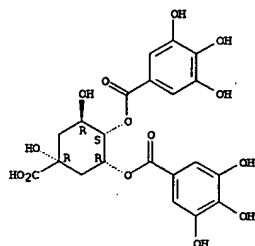
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and sulfation of, by chlorosulfonic acid)

RM 53505-97-8 CAPIUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RM 99745-62-7 CAPIUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2 α ,3R,5 α)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 49 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:70866 CAPIUS

DOCUMENT NUMBER: 114:70866

TITLE: Preparation of sulfated tannins and their salts as reverse transcriptase inhibitors and antiviral agents
Fukuchi, Akira; Iwamoto, Masaya; Uchino, Keijiro; Ogawara, Hiroshi; Nakashima, Hideki; Yamamoto, Naoki; Hirayama, Fukushi; Hiramoto, Masashi; Yamamoto, Hirokazu; Kadota, Shigenobu

PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan; Nippon Flour Mills Co., Ltd.

SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

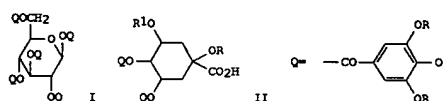
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 374888	A2	19900627	EP 1989-123562	19891220
EP 374888	A3	19911016		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 03072490	A	19910327	JP 1989-323276	19891213
US 5159069	A	19921027	US 1989-450912	19891214
ZA 8909731	A	19900926	ZA 1989-9731	19891219
CA 2006263	A1	19900620	CA 1989-2006263	19891220
PRIORITY APPL. INFO.:			JP 1989-320947	A 19881220
			JP 1989-121700	A 19890516

OTHER SOURCE(S): MARPAT 114:70866

ED Entered STN: 12 Jan 1991

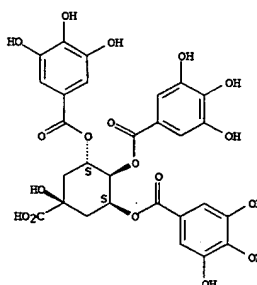
GI



AB The title compounds (I, II; R = H, SO₃H, provided that at least one of the substituents R = SO₃H; R₁ = H, SO₃H, Q) or their salts, inhibiting syncytium formation and useful for treating patients infected with a virus, particularly AIDS virus, herpes virus, influenza virus, or rhinovirus, are prepared by reacting tannin with a sulfonating agent under basic conditions, the tannin being selected from hydrolyzable tannins and polyhydric phenols obtained by hydrolyzing the hydrolyzable tannins. Thus, to a suspension of 300 mg tannic acid (III) (Wako Pure Chemical Industries, Ltd.) in 45 mL pyridine was added 11.4 g ClSO₃H dropwise with ice-cooling and the mixture was stirred 2 days at room temperature, treated

with H₂O under ice cooling, neutralized with saturated aqueous NaHCO₃, and extracted with

L3 ANSWER 49 OF 70 CAPIUS COPYRIGHT 2007 ACS on STN (Continued)



IT 53505-97-8DP, sulfuric acid esters, sodium salts

99745-62-7DP, sulfuric acid esters, sodium salts

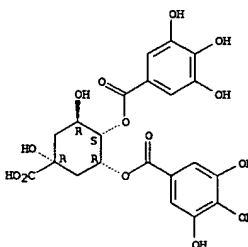
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as virucide and reverse transcriptase inhibitor)

RM 53505-97-8 CAPIUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

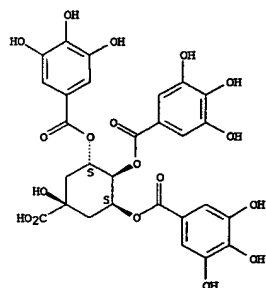


RM 99745-62-7 CAPIUS

CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2 α ,3R,5 α)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 49 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



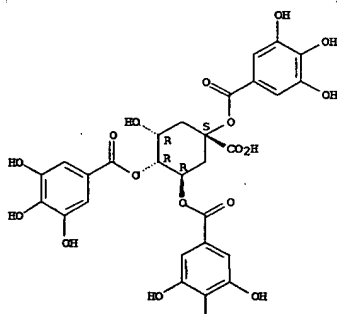
L3 ANSWER 50 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:568816 CAPLUS
 DOCUMENT NUMBER: 113:168816
 TITLE: Anti-AIDS agents. 2: Inhibitory effects of tannins on HIV reverse transcriptase and HIV replication in H9 lymphocyte cells
 AUTHOR(S): Nonaka, Genichiro; Nishio, Itsuo; Nishizawa, Makoto; Yamagishi, Takashi; Kashiwada, Yoshiki; Dutchenman, Ginger E.; Bodner, Anne J.; Kilkuskie, Robert E.; Cheng, Yung Chi; Lee, Kuo Hsiung
 CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
 SOURCE: Journal of Natural Products (1990), 53(3), 587-95
 CODEN: JNPRDF; ISSN: 0163-3864
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 09 Nov 1990
 AB Nine tannins, including gallo- and ellagitannins, were evaluated as potential inhibitors of HIV replication. 1,3,4-Tri-O-galloylquinic acid, 3,4-di-O-galloylshikimic acid, 3,4,5-tri-O-galloylshikimic acid, punicalin, and punicalagin, inhibited HIV replication in infected H9 lymphocytes with little cytotoxicity. Two compds., punicalin and punicalagetin C, inhibited purified HIV reverse transcriptase with ID50 of 8 and 5 μ M, resp. Further studies with H9 lymphocytes indicated that chebulagic acid and punicalin did not inactivate virus directly. However, 1,3,4-tri-O-galloylquinic acid and 3,4-di-O-galloylshikimic acid were more effective inhibitors under those conditions. All tannins appear to inhibit virus-cell interactions. Thus, in spite of their anti-reverse transcriptase activity, the mechanism by which tannins inhibit HIV may not be associated with this enzyme.
 IT 110082-89-8 129159-07-5
 RL: BIOL (Biological study)
 (HIV virus inhibition by)
 RN 110082-89-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, [1R-(1a,2b,4a,6a)]- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 50 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

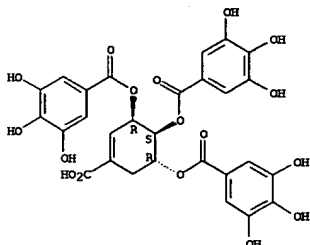
PAGE 1-A



PAGE 2-A

RN 129159-07-5 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-4-cyclohexene-1,2,3-triyl ester, [1R-(1a,2b,3b)]- (9CI) (CA INDEX NAME)

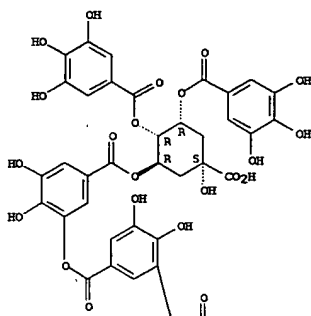
Absolute stereochemistry.



L3 ANSWER 51 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1990:121008 CAPLUS
 DOCUMENT NUMBER: 112:121008
 TITLE: Hydrolysis by fermentation of tannins from gall nuts
 AUTHOR(S): Regerat, F.; Pourrat, H.; Pourrat, A.
 CORPORATE SOURCE: Lab. Pharmacogn. Biotechnol., Fac. Pharm.,
 Clermont-Ferrand, 63001, Fr.
 SOURCE: Journal of the American Leather Chemists Association
 (1989), 84(11), 323-8
 CODEN: JALCAQ; ISSN: 0002-9726
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 31 Mar 1990
 AB Tannin extract of gall nuts from the oak (*Quercus infectoria*) was hydrolyzed
 by the tannase of a selected strain of *Aspergillus niger*. Hydrolysis of
 polygalloylglucose and polygalloylquinic esters occurred in the same way
 in tannins from sumac and tara and was complete in 22 to 30 h. High
 yields of gallic acid were obtained.
 IT 52238-34-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (hydrolysis of, by tannase from *Aspergillus niger*, gallic acid
 preparation
 by)
 RN 52238-34-3 CAPLUS
 CN Benzoic acid, 3-[[[3,4-dihydroxy-5-[(3,4,5-trihydroxybenzoyl)oxy]benzoyl]ox
 y]-4,5-dihydroxy-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-
 trihydroxybenzoyl)oxy]cyclohexyl ester, (1a,2p,3p,5p)-
 (9CI) (CA INDEX NAME)

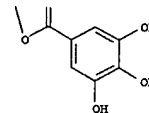
Relative stereochemistry.

PAGE 1-A



L3 ANSWER 51 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

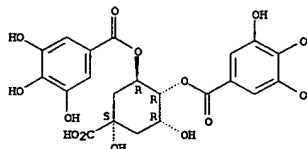
PAGE 2-A



L3 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1990:111495 CAPLUS
 DOCUMENT NUMBER: 112:111495
 TITLE: Characterization of a novel inhibitor of human DNA
 polymerases: 3,4,5-tri-O-galloylquinic acid
 AUTHOR(S): Parker, William B.; Mishizawa, Makoto; Fisher, Michael
 H.; Ye, Wang; Lee, Ruo Hsiung; Cheng, Yung Chi
 CORPORATE SOURCE: Sch. Med., Univ. North Carolina, Chapel Hill, NC,
 27599, USA
 SOURCE: Biochemical Pharmacology (1989), 38(21), 3759-65
 CODEN: BCPAC6; ISSN: 0006-2952
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 31 Mar 1990
 AB Various galloyl derivs. of quinic acid were found to be inhibitors of
 human DNA polymerases. Among them, 3,4,5-tri-O-galloylquinic acid (TGQA)
 was the most potent inhibitor of DNA polymerase α . Under identical
 conditions, this compound was 60-fold more potent than aphidicolin as an
 inhibitor of DNA polymerase α . The inhibition of DNA polymerase
 α by this compound was not competitive with either the template or any
 of the deoxynucleoside triphosphates with a K_i of 0.28 μ M. Under
 similar reaction conditions, DNA polymerases β and γ were much
 less sensitive to the effects of these compds. and, in contrast to the
 effect seen with DNA polymerase α , the inhibition of DNA polymerases
 β and γ by TGQA was competitive with respect to the template
 with K_i values of 44.4 and 7.5 μ M resp. The potency of these compds.
 against DNA polymerase γ varied according to the assay conditions
 used. The inhibition of DNA polymerase γ by TGQA could be increased
 substantially by using $MnCl_2$ in place of $MgCl_2$ and by including 50 μ M
 potassium phosphate, pH 7.5, in the assay mixture. DNA polymerase β was
 also more sensitive to TGQA when assayed with $MnCl_2$. However, potassium
 phosphate had little, if any, effect on the inhibition by TGQA of either
 DNA polymerase α or β . DNA polymerase α was less
 sensitive to TGQA when assayed with $MnCl_2$. TGQA was not a potent
 inhibitor of human KB cell growth in culture, which could be due to its
 degradation or poor uptake. Nevertheless, this compound could serve as a
 model
 for developing antitumor drugs targeted at DNA polymerases.
 IT 86687-37-8, 3,4-Di-O-galloylquinic acid 99745-62-7,
 3,4,5-Tri-O-galloylquinic acid 125369-71-3 125637-29-8
 125637-30-1 125710-35-2
 RI: BIOL (Biological study)
 (DNA polymerase-inhibiting activity of, in humans, antitumor activity
 and structure in relation to)
 RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-
 cyclohexanediyl ester (9CI) (CA INDEX NAME)

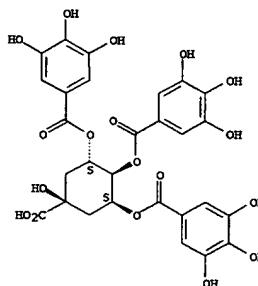
Absolute stereochemistry.

L3 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-5-
 hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

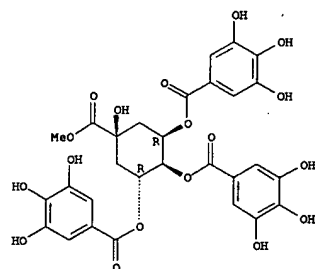
Relative stereochemistry.



RN 125369-71-3 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-5-
 (methoxycarbonyl)-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

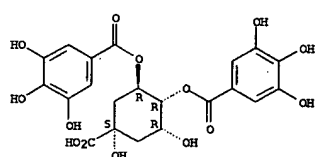


RN 125637-29-8 CAPLUS
 CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-3,5-dihydroxy-2-[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1 α ,2 β ,3 β ,5 β)]- (9CI) (CA INDEX NAME)

CM 1

CRN 86687-37-8
 CMF C21 H20 O14

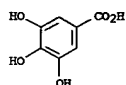
Absolute stereochemistry.



CM 2

CRN 149-91-7
 CMF C7 H6 O5

L3 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

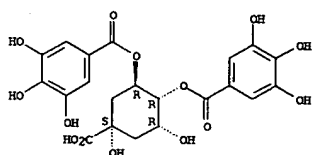


RN 125710-35-2 CAPLUS
 CN Benzoic acid, dihydroxy[(3,4,5-trihydroxybenzoyl)oxy]-, 4-carboxy-2,4-dihydroxy-6-[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester (9CI) (CA INDEX NAME)

CM 1

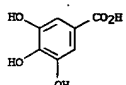
CRN 86687-37-8
 CMF C21 H20 O14

Absolute stereochemistry.

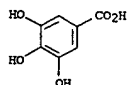


CM 2

CRN 149-91-7
 CMF C7 H6 O5



L3 ANSWER 52 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

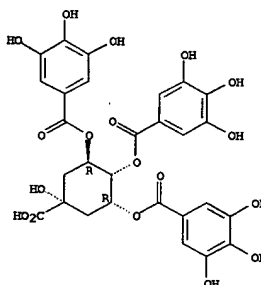


RN 125637-30-1 CAPLUS
 CN Benzoic acid, 3,4(or 3,5)-dihydroxy-5(or 4)-[(3,4,5-trihydroxybenzoyl)oxy]-, 4-carboxy-4-hydroxy-2,6-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1S-(1 α ,2 α ,4 α ,6 β)]- (9CI) (CA INDEX NAME)

CM 1

CRN 94414-04-7
 CMF C28 H24 O18

Absolute stereochemistry.

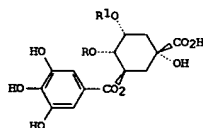


CM 2

CRN 149-91-7
 CMF C7 H6 O5

L3 ANSWER 53 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:570963 CAPLUS
 DOCUMENT NUMBER: 111:170963
 TITLE: Anti-AIDS agents. 1. Isolation and characterization of four new tetragalloylquinic acids as a new class of HIV reverse transcriptase inhibitors from tannic acid
 Nishizawa, Makoto; Yamagishi, Takashi; Dutschman, Ginger E.; Parker, William B.; Bodner, Anne J.; Kilkuskie, Robert E.; Cheng, Yung Chi; Lee, Kuo Hsiung
 Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
 SOURCE: Journal of Natural Products (1989), 52(4), 762-8
 CODEN: JNPADF; ISSN: 0163-3864
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 10 Nov 1989
 GI

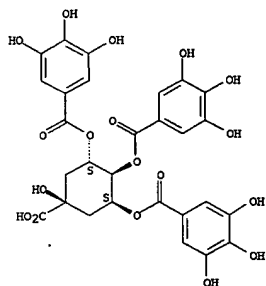


I, R=digalloyl, R¹=galloyl
 II, R=galloyl, R¹=digalloyl

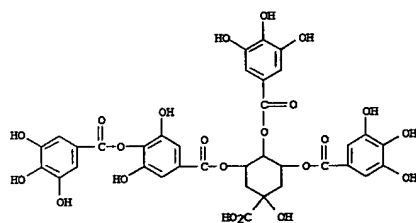
AB Four new tetragalloylquinic acids, 3,5-di-O-galloyl-4-O-digalloylquinic acid (I) 3,4-di-O-galloyl-5-O-digalloylquinic acid (II) 3-O-digalloyl-4,5-di-O-galloylquinic acid, and 1,3,4,5-tetra-O-galloylquinic acid, were isolated from a com. tannic acid as a new class of human immunodeficiency virus (HIV) reverse transcriptase (RT) inhibitor. The 1st 3 compds. inhibit HIV RT activity 90, 89, and 84% at 100 μ M and 73, 70, and 63% at 30 μ M, resp. All 4 compds. inhibit the HIV growth in cells in the range of 61-70% with low cytotoxicity at 25 μ M. The HIV cell growth inhibitory effects of these compds. at 25 μ M and 6.25 μ M (44-57%) are comparable to their effects against the HIV RT at 30 μ M and 10 μ M, resp. The inhibitory effect of II against DNA polymerases indicates that the selective antiviral action of II is determined by more than its action with HIV RT.
 IT 99745-62-7P, 3,4,5-Tri-O-galloylquinic acid 123134-20-3P 123166-69-8P 123166-70-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and antiviral activity of)
 RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2 α ,3R,5 α)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 53 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 123134-20-3 CAPLUS
 CN Benzoic acid, 3,5-dihydroxy-4-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1a,2a,3a,4a)]- (9CI) (CA INDEX NAME)



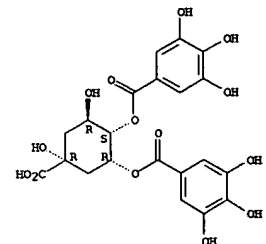
RN 123166-69-8 CAPLUS
 CN Benzoic acid, 3,5-dihydroxy-4-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, [1R-(1a,2a,3a,4a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

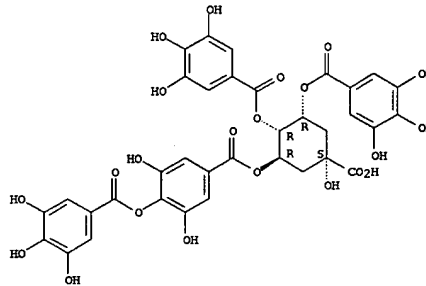
L3 ANSWER 54 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:21078 CAPLUS
 DOCUMENT NUMBER: 110:21078
 TITLE: Tannins and related polyphenols of Euphorbiaceae plants. IV. Euphorbins A and B, novel dimeric dehydroellagitannins from Euphorbia hirta L. Yoshida, Takashi; Chen, Ling; Shingu, Tetsuro; Okuda, Takuo
 AUTHOR(S): Fac. Pharm. Sci., Okayama Univ., Tsushima, 700, Japan
 CORPORATE SOURCE: Chemical & Pharmaceutical Bulletin (1988), 36(8), 2940-9
 SOURCE: CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 21 Jan 1989
 AB Two new dimeric dehydroellagitannins, named euphorbin A and euphorbin B were isolated from the aerial parts of E. hirta, and their structures, containing 4C1 and 1C4 glucopyranose residues and a dehydrohexahydroxydibenzoyl group, were elucidated on the basis of chemical and spectral studies. Five monomeric hydrolyzable tannins, i.e., 2,4,6-tri-O-galloyl-D-glucose, 1,3,4,6-tetra-O-galloyl-B-D-glucose, 1,2,3,4,6-penta-O-galloyl-B-D-glucose, gerranin, and terchebin, as well as 2 quinic acid esters, i.e., 5-O-caffeoylquinic acid and 3,4-di-O-galloylquinic acid, and 3 flavonol glycosides were also isolated.
 IT 53505-97-8
 RL: BIOL (Biological study)
 (from Euphorbia hirta)
 RN 53505-97-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

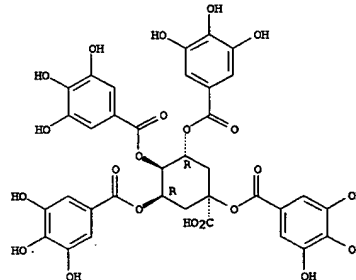


L3 ANSWER 53 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 123166-70-1 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-1,2,3,5-cyclohexanetetrayl ester (9CI) (CA INDEX NAME)

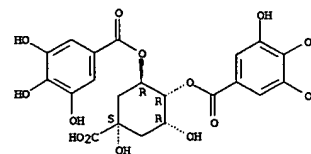
Absolute stereochemistry.



L3 ANSWER 55 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:512636 CAPLUS
 DOCUMENT NUMBER: 107:112636
 TITLE: Tannins and related compounds. Part 57. Gallic acid esters of proto-quercitol, quinic acid and (-)-shikimic acid from Quercus mongolica and Q. myrsinaefolia Ishimaru, Kanji; Nonaka, Genichiro; Nishioka, Itsuo
 AUTHOR(S): Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan
 CORPORATE SOURCE: Phytochemistry (1987), 26(5), 1501-4
 SOURCE: CODEN: PYTCAS; ISSN: 0031-9422
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 05 Oct 1987
 AB Six new gallotannins: 1-O- and 1,4-di-O-galloyl proto-quercitols, 1,4-di-O- and 1,3,4-tri-O-galloylquinic acids, and 4-O- and 5-O-galloyl(-)-shikimic acids were isolated from acorns of Q. mongolica and leaves of Q. myrsinaefolia and their structures elucidated on the basis of chemical and spectroscopic evidence.
 IT 86687-37-8
 RL: BIOL (Biological study)
 (from Quercus species)
 RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

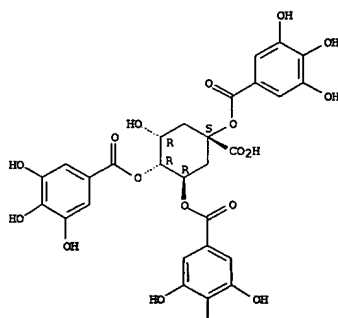


IT 110082-89-8
 RL: BIOL (Biological study)
 (from Quercus species, isolation and structure determination of)
 RN 110082-89-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 4-carboxy-6-hydroxy-1,2,4-cyclohexanetriyl ester, [1R-(1a,2a,4a,6a)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 55 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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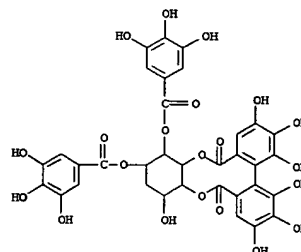


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L3 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

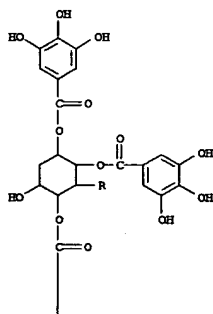
ACCESSION NUMBER: 1987:172897 CAPLUS
 DOCUMENT NUMBER: 106:172897
 TITLE: Tannins and related compounds. Part 44. Scyllo-quercitol gallates and hexahydroxydiphenolates from Quercus stenophylla
 AUTHOR(S): Nishimura, Hiroaki; Nonaka, Genichiro; Nishioka, Itsuo
 CORPORATE SOURCE: Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan
 SOURCE: Phytochemistry (1986), 25 (11), 2599-604
 CODEN: PHYTAS; ISSN: 0031-9422
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 29 May 1987
 AB A series of gallotannins and ellagitannins based on a scyllo-quercitol core were isolated from the bark of Q. stenophylla. On the basis of chemical and spectroscopic evidence, the structures of the gallotannins were established as 2-O-, 1,2-di-O-, 1,2,3-tri-O-, 1,2,3,4-tetra-O-, and 1,2,3,4,5-penta-O-galloyl-scyllo-quercitols, and the ellagitannins as 1,5-di-O-galloyl-2,3-(S)-hexahydroxydiphenyl-scyllo-quercitol and 1,4-(or 4,5)-di-O-galloyl-2,3-(S)-hexahydroxydiphenyl-scyllo-quercitol.
 IT 107693-10-7 107724-19-6 107794-82-1
 107794-83-2 107794-84-3
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (of Quercus stenophylla bark)
 RN 107693-10-7 CAPLUS
 CN D-myo-Inositol, 2-deoxy-, cyclic 5,6-(4,4',5,5',6,6'-hexahydroxy[1,1'-biphenyl]-2,2'-dicarboxylate) 3,4-bis(3,4,5-trihydroxybenzoate), [5(S)]-(9CI) (CA INDEX NAME)



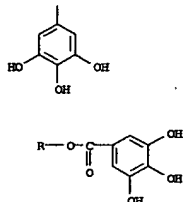
RN 107724-19-6 CAPLUS
 CN myo-Inositol, 2-deoxy-, 1,4,5,6-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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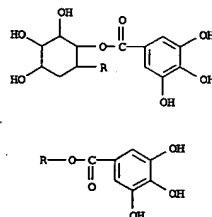


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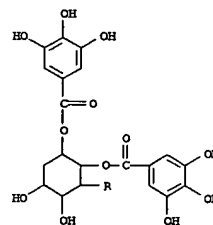
RN 107794-82-1 CAPLUS
 CN D-myo-Inositol, 2-deoxy-, 1,6-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

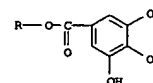


RN 107794-83-2 CAPLUS
 CN D-myo-Inositol, 2-deoxy-, 1,5,6-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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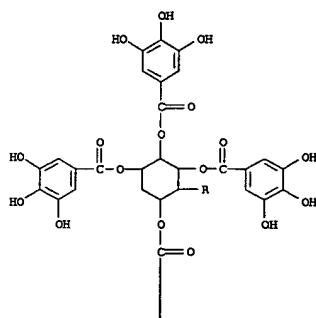
PAGE 2-A



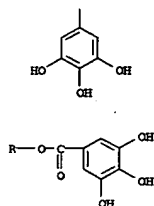
RN 107794-84-3 CAPLUS
 CN myo-Inositol, 2-deoxy-, pentakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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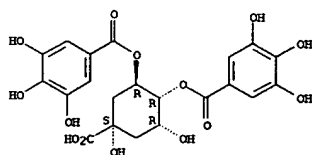


IT 107794-86-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 reaction (preparation and methylation and oxidation and dinitrophenylhydrazine
 with)
 RN 107794-86-5 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 3,4-bis(3,4,5-trihydroxybenzoate) (9CI) (CA

L3 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

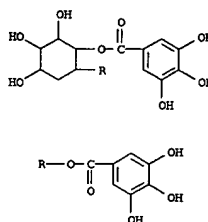
ACCESSION NUMBER: 1986:28390 CAPLUS
 DOCUMENT NUMBER: 104:28390
 TITLE: Structure and antiherpetic activity among the tannins
 AUTHOR(S): Takechi, Masayuki; Tanaka, Yasuo; Takehara, Manabu;
 Nomaka, Genichiro; Nishioka, Itsumi
 CORPORATE SOURCE: Fac. Pharm. Sci., Kinki Univ., Higashiosaka, Japan
 SOURCE: Phytochemistry (Elsevier) (1985), 24(10), 2245-50
 CODEN: PHYCAS; ISSN: 0031-9422
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 08 Feb 1986
 AB In order to investigate the relationship between the antiherpetic activity
 and the structure of tannins, the activities of 38 such compds. were
 examined. The results indicate that the activities of hydrolyzable tannins
 were dependent on the number of galloyl or hexahydroxydiphenoyl groups and
 those of condensed ones on the degree of condensation. On the other hand,
 the more active tannins were the more cytotoxic. *
 IT 86687-37-8 99745-59-2 99745-60-5
 99745-61-6 99745-62-7
 RL: BIOL (Biological study)
 (herpes virus-inhibitory activity and cytotoxicity of, structure in
 relation to)
 RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-
 cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

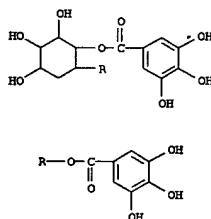


RN 99745-59-2 CAPLUS
 CN chiro-Inositol, 2-deoxy-, 3,4-bis(3,4,5-trihydroxybenzoate) (9CI) (CA
 INDEX NAME)

L3 ANSWER 56 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

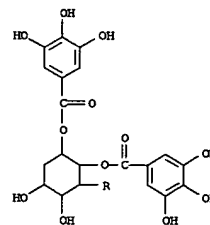


L3 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

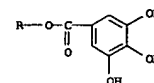


RN 99745-60-5 CAPLUS
 CN chiro-Inositol, 2-deoxy-, 3,4,5-tris(3,4,5-trihydroxybenzoate) (9CI) (CA
 INDEX NAME)

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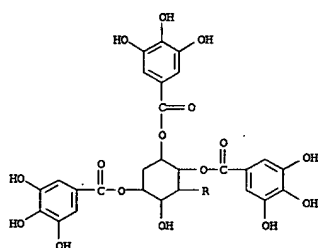
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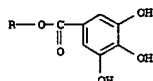
RN 99745-61-6 CAPLUS
 CN chiro-Inositol, 2-deoxy-, 1,3,4,5-tetrakis(3,4,5-trihydroxybenzoate) (9CI)
 (CA INDEX NAME)

L3 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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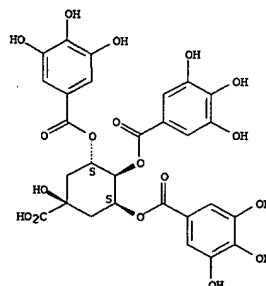
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RN 99745-62-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester, rel- (9CI) (CA INDEX NAME)

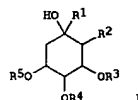
Relative stereochemistry.

L3 ANSWER 57 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L3 ANSWER 58 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1985:509929 CAPLUS
 DOCUMENT NUMBER: 103:109929
 TITLE: Medicinal tannins from plants
 PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JOKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60064947	A	19850413	JP 1984-161807	19840731
JP 60050778	B	19851111		
PRIORITY APPL. INFO.:			JP 1984-161807	19840731
ED Entered STN: 04 Oct 1985				
GI				



AB Novel, medicinal tannins (I) (where R1 = H or CO2H; R2 = H or OH; R3, R4, or R5 = H or galloyl) are isolated from plants such as Quercus stenophylla. Thus, the bark of Q. stenophylla was extracted with 80% Me2CO in H2O, the extract

was distilled, the aqueous phase was extracted in EtOAc, and the EtOAc fraction was

chromatographed on Sephadex LH-20 to give 3,4-di-O-galloylquinic acid [86687-37-8]. The structure was determined by NMR and mass spectroscopy. A yield of 0.006% was obtained.

IT 53505-97-8 86588-92-3 86589-93-4
 86687-37-8

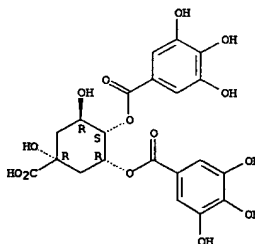
RL: BIOL (Biological study)
 (of Quercus stenophylla barks)

RN 53505-97-8 CAPLUS

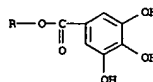
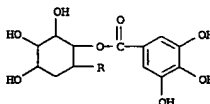
CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 58 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



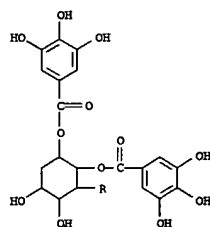
RN 86588-92-3 CAPLUS
 CN L-chiro-Inositol, 2-deoxy-, 3,4-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)



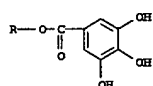
RN 86588-93-4 CAPLUS
 CN L-chiro-Inositol, 2-deoxy-, 3,4,5-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 58 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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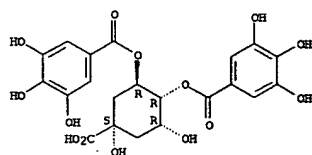


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RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

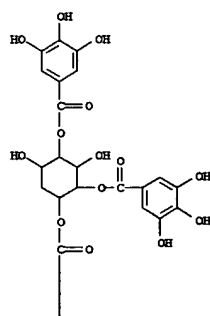
ACCESSION NUMBER: 1985:201372 CAPLUS
 DOCUMENT NUMBER: 102:201372
 TITLE: New tannins from elm, oak, pomegranate, and tea
 PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59196884	A	19841108	JP 1983-70774	19830420
JP 62022990	B	19870520		

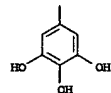
PRIORITY APPLN. INFO.:
 ED Entered STN: 15 Jun 1985
 AB Twenty-three new tannins were isolated from barks of garden burnet and an evergreen oak, mehirugi (a medicinal plant), and leaves of pomegranate and tea. The tannins were identified and their structure elucidated by optical characteristics, elemental anal., and PMR.
 IT 91431-96-8 91431-97-9 91431-99-1
 91432-00-7
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
 (of evergreen oak bark)
 RN 91431-96-8 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 3,4,6-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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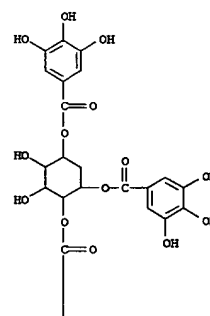
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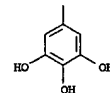
RN 91431-97-9 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 1,3,4-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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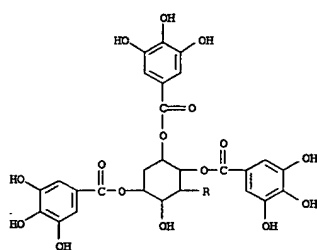
PAGE 2-A



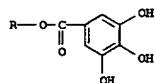
RN 91431-99-1 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 1,3,4,5-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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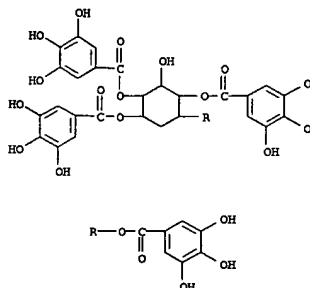


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RN 91432-00-7 CAPLUS
 CN D-chiro-Inositol, 2-deoxy-, 1,3,4,6-tetrakis(3,4,5-trihydroxybenzoate)
 (9CI) (CA INDEX NAME)

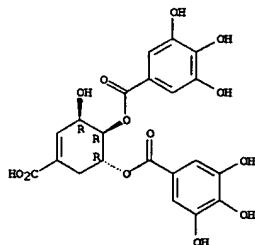
L3 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L3 ANSWER 60 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:163692 CAPLUS
 DOCUMENT NUMBER: 102:163692
 TITLE: Tannins and related compounds. XXV. A new class of gallotannins possessing a (-)-shikimic acid core from *Castanopsis cuspidata* var. *sieboldii* Nakai. (I) Nonaka, Genichiro; Ageta, Masayuki; Nishioka, Itsuo Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan Chemical & Pharmaceutical Bulletin (1985), 33(1), 96-101 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 18 May 1985
 AB A homologous series of (-)-shikimic acid gallates (I-V) was isolated, together with 1,6-di-O-galloyl-β-D-glucopyranoside, 5-O-galloyl-D-hamamelose, 2',5-di-O-galloyl-D-hamamelose, and 2',3,5-tri-O-galloyl-D-hamamelose, from the leaves of *C. cuspidata* var. *sieboldii*. On the basis of spectroscopic anal., enzymic hydrolysis, and methanolysis, their structures were established as 3-O-gallate (I), 3-O-digallate (II), 3-O-trigallate (III), 3,5-di-O-gallate (IV), and 3,4-di-O-gallate (V) of (-)-shikimic acid.
 IT 95753-51-8
 RI: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (of *Castanopsis cuspidata* leaves)
 RN 95753-51-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 5-carboxy-3-hydroxy-4-cyclohexene-1,2-diyl ester, [1R-(1a,2β,3β)]- (9CI) (CA INDEX NAME)

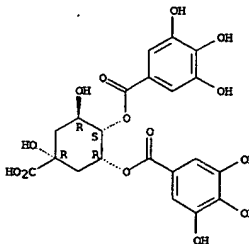
Absolute stereochemistry.



L3 ANSWER 61 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:59316 CAPLUS
 DOCUMENT NUMBER: 102:59316
 TITLE: Tannins and related compounds. Part 24. Seven quinic acid gallates from *Quercus stenophylla* Nishimura, Hiroaki; Nonaka, Genichiro; Nishioka, Itsuo Fac. Pharm. Sci., Kyushu Univ., Fukuoka, 812, Japan
 SOURCE: Phytochemistry (Elsevier) (1984), 23(11), 2621-3 CODEN: PYTCAS; ISSN: 0031-9422
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 24 Feb 1985
 AB A chemical investigation of the bark of *Q. stenophylla* led to the isolation and characterization of all of the possible structural isomers of quinic acid gallates, i.e., 3-O-, 4-O-, 5-O-, 3,4-di-O-, 3,5-di-O-, 4,5-di-O-, and 3,4,5-tri-O-galloylquinic acids. Evidence for the structures of these compds. was obtained from anal. of the 1H and 13C NMR spectra, and hydrolytic studies.
 IT 53505-97-8 86687-37-8 94414-04-7
 RI: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence) (of oak bark)
 RN 53505-97-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

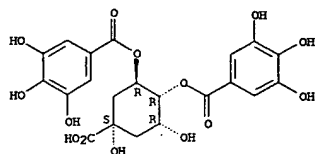
Absolute stereochemistry.



RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

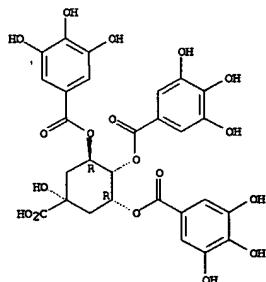
Absolute stereochemistry.

L3 ANSWER 61 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



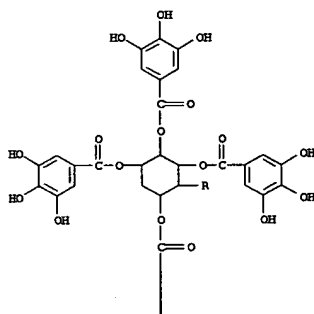
RN 94414-04-7 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2a,3R,5a)-5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

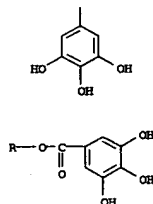


L3 ANSWER 62 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L3 ANSWER 62 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1984:507678 CAPLUS
 DOCUMENT NUMBER: 101:107678
 TITLE: Enzyme-inhibitory tannins
 PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKOKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59059638	A	19840405	JP 1982-170013	19820928
JP 61036826	B	19860820		
JP 61112089	A	19860530	JP 1985-245748	19851031
JP 62045240	B	19870925		
JP 61112080	A	19860530	JP 1985-245749	19851031
JP 01060475	B	19891222		
JP 61112068	A	19860530	JP 1985-245751	19851031
JP 61112090	A	19860530	JP 1985-245752	19851031
JP 62049279	B	19871019		
JP 61118395	A	19860605	JP 1985-245750	19851031
JP 62049278	B	19871019		

PRIORITY APPLN. INFO.:

ED Entered STN: 29 Sep 1984

AB New types of tannins having enzyme inhibitor activities were isolated from barks of elm, oak, cassia, cinchona, chestnut, etc. The tannins were identified as 3-o-galloyl-28-o-β-D-glucopyranosyl-2a,3b,19a-trihydroxyolean-24,28-dioic acid, 2,3-HHDP-4,6-di-o-galloyl glucose 3,4-HHDP-1,5-di-o-galloyl protoquercitol, 3-o-galloyl-28-o-β-D-glucopyranosyl-2a,3b,19a-trihydroxyolean-12-en-24,28-dioic acid, and 2,3-HHDP-6-o-galloyl glucose.

IT 91686-12-3
 RL: BIOL (Biological study)
 (enzyme-inhibitory)

RN 91686-12-3 CAPLUS

CN chiro-Inositol, 2-deoxy-, pentakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1984:487476 CAPLUS
 DOCUMENT NUMBER: 101:87476

Tannins and related compounds. XIX. Eight new gallotannins containing a proto-quercitol core from Quercus stenophylla Makino. (3)
 Nishimura, Hiroaki; Nonaka, Genichiro; Nishioka, Itsuo
 Fac. Pharm. Sci., Kyushu Univ. 62, Fukuoka, 812, Japan
 Chemical & Pharmaceutical Bulletin (1984), 32(5), 1741-9
 CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 15 Sep 1984

AB By a combination of adsorption and partition chromatog., 8 new protoquercitol gallates were isolated from the tannin fraction of the bark of Q. stenophylla (Fagaceae). Their structures were characterized mainly by 1H-NMR exams. combined with the spin-decoupling techniques as 4,5-di-O-gallate, 3,4,5-tri-O-gallate, 2,4,5-tri-O-gallate, 1,4,5-tri-O-gallate, 1,3,5-tri-O-gallate, 1,3,4,5-tetra-O-gallate, 1,2,4,5-tetra-O-gallate, and 1,2,3,4,5-penta-O-gallate of protoquercitol (desoxyinositol).

IT 91431-96-8 91431-97-9 91431-99-1

91432-00-7 91432-01-8 91465-75-7

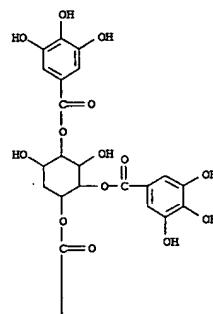
RL: BIOL (Biological study)

(from oak bark, structure of)

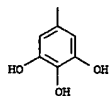
RN 91431-96-8 CAPLUS

CN D-chiro-Inositol, 2-deoxy-, 3,4,6-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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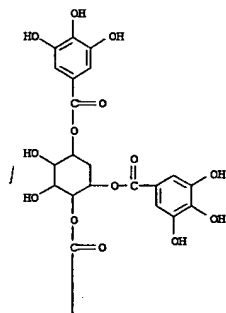


L3 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
PAGE 2-A

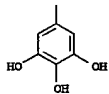


RN 91431-97-9 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 1,3,4-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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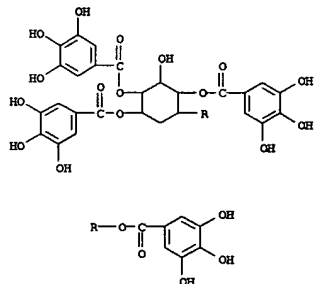


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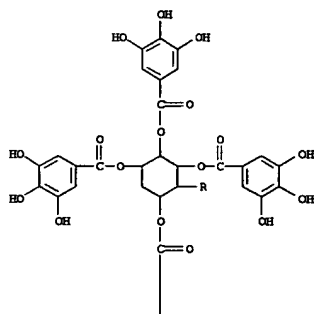
RN 91431-99-1 CAPLUS

L3 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



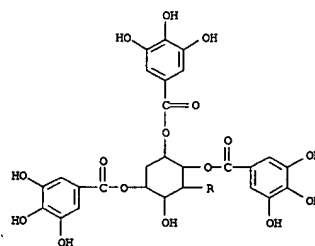
RN 91432-01-8 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, pentakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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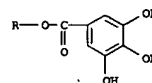


L3 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN D-chiro-Inositol, 2-deoxy-, 1,3,4,5-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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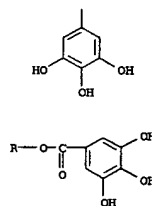
PAGE 2-A



RN 91432-00-7 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 1,3,4,6-tetrakis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

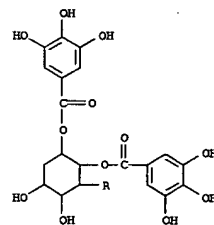
L3 ANSWER 63 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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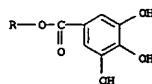


RN 91465-75-7 CAPLUS
CN D-chiro-Inositol, 2-deoxy-, 3,4,5-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

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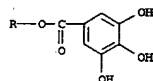
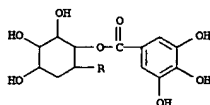


L3 ANSWER 64 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1983:476851 CAPLUS
 DOCUMENT NUMBER: 99:76851
 TITLE: Tannins
 PATENT ASSIGNEE(S): Nippon Shinyaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKOKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58032875	A	19830225	JP 1981-120372	19810730
JP 60011912	B	19850328		

PRIORITY APPLN. INFO.:
 ED Entered STN: 12 May 1984

AB Some forty tannins useful as metabolic regulators were isolated from myrica bark, cassia bark, betel-nuts, burnets, Trapa natans, beech bark, deer berry leaves, camphor trees, and chestnut bark. Thus, 6 kg myrica bark was extracted with 10 + 1 L AcOEt and chromatographed over Sephadex LH-20 using EtOH and 80% aqueous MeOH as eluting agents to give 70 mg 3'-O-galloylprodelphinidin B-2 [86588-88-7], 0.02% 3,3'-di-O-galloylprodelphinidin [86588-89-8], and 0.04% 3,3'-di-O-galloylprodelphinidin B-9 [86631-40-5].
 IT 86588-92-3 86588-93-4 86687-37-8
 RI: BIOL (Biological study)
 (as animal metabolic regulator from Quercus stenophylla)
 RN 86588-92-3 CAPLUS
 CN L-chiro-Inositol, 2-deoxy-, 3,4-bis(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)



RN 86588-93-4 CAPLUS
 CN L-chiro-Inositol, 2-deoxy-, 3,4,5-tris(3,4,5-trihydroxybenzoate) (9CI) (CA INDEX NAME)

L3 ANSWER 65 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1975:81970 CAPLUS
 DOCUMENT NUMBER: 82:81970
 TITLE: Polyphenol-protein interactions
 AUTHOR(S): Haslam, Edwin
 CORPORATE SOURCE: Dep. Chem., Univ. Sheffield, Sheffield, UK
 SOURCE: Biochemical Journal (1974), 139(1), 285-8
 CODEN: BIJOAK; ISSN: 0264-6021
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984

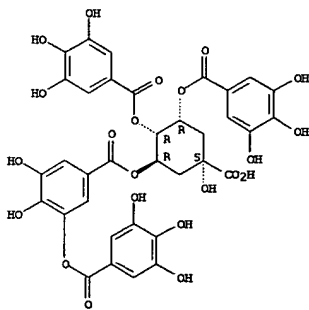
AB Studies on the precipitation of β -glucosidase (EC 3.2.1.21) [9001-22-3] by natural and synthetic polyphenols, e.g. p-penta-O-galloyl-D-glucose (I), indicated that the polyphenol-protein complex formation was caused by crosslinking of protein mols. by phenol. Tanning capacity, although related to mol. size, was primarily dependent on the number of sep. sites in the mol. able to associate with the protein, i.e., for the galloylglucose series, the number of galloyl groups. Thus Tara gallotannin and I have 3

and 5 sites resp.; procyanidins B-2 [29106-49-8] and C-1 [37064-31-6] probably have 2 and 3 sites, resp.

IT 52238-33-2 52238-34-3
 RI: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with β -glucosidase)

RN 52238-33-2 CAPLUS
 CN Benzoic acid, 3,4-dihydroxy-5-[(3,4,5-trihydroxybenzoyl)oxy]-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, (1a,2 β ,3 β ,5 β) (9CI) (CA INDEX NAME)

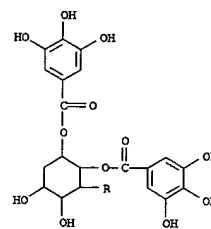
Relative stereochemistry.



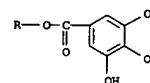
RN 52238-34-3 CAPLUS
 CN Benzoic acid, 3-[(3,4-dihydroxy-5-[(3,4,5-trihydroxybenzoyl)oxy]benzoyl)oxy]-4,5-dihydroxy-, 5-carboxy-5-hydroxy-2,3-bis[(3,4,5-trihydroxybenzoyl)oxy]cyclohexyl ester, (1a,2 β ,3 β ,5 β) (9CI) (CA INDEX NAME)

L3 ANSWER 64 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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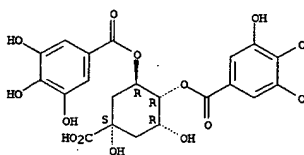


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RN 86687-37-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2R,3R,5S)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

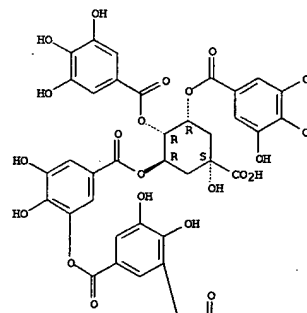
Absolute stereochemistry.



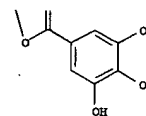
L3 ANSWER 65 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Relative stereochemistry.

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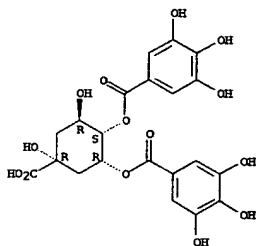


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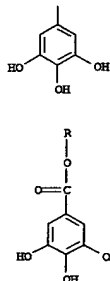


L3 ANSWER 66 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1974:576186 CAPLUS
 DOCUMENT NUMBER: 91:176186
 TITLE: Polarimetric analysis of hydroxycinnamic acid esters
 AUTHOR(S): Oranik, L. I.; Litvinenko, V. I.
 CORPORATE SOURCE: Khar'k. Nauchno-Issled. Khim.-Farm. Inst., Kharkov, USSR
 SOURCE: Fenol'nye Soedin. Ikh Fiziol. Svoistva, Mater. Vses. Simpoz. Fenol'nym Soedin., 2nd (1973), Meeting Date 1971, 176-80. Editor(s): Klyshev, L. K. "Nauka" Kaz. SSR: Alma-Ata, USSR.
 CODEN: 28NHEM
 DOCUMENT TYPE: Conference
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB Polarimetric measurements of the following esters of quinic acid were performed: 1-caFFEyl, 1-feruloyl, 1-(p-coumaroyl), 1-galloyl, 5-caFFEyl, 5-(p-coumaroyl), 5-galloyl, 3-pheruloyl, 3-(p-coumaroyl), 3-galloyl, 4-caFFEyl, 4-(p-coumaroyl), 4-galloyl, 4,5-dicaFFEyl, 1,5-dicaFFEyl, 1,4-dicaFFEyl, and 4,5-digalloyl. For measurements the substances were dissolved in either H₂O, MeOH, or Me₂CO. Conformations of the esters measured were suggested.
 IT 53505-97-8
 RI: ANT (Analyte): ANST (Analytical study) (determination of, polarimetric)
 RN 53505-97-8 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, (1R,2S,3R,5R)-5-carboxy-3,5-dihydroxy-1,2-cyclohexanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

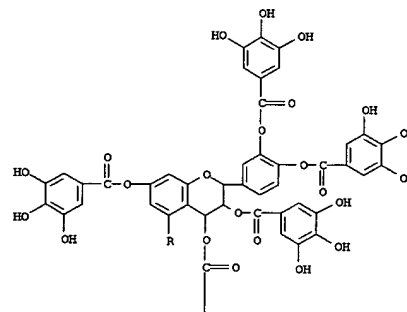


L3 ANSWER 67 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
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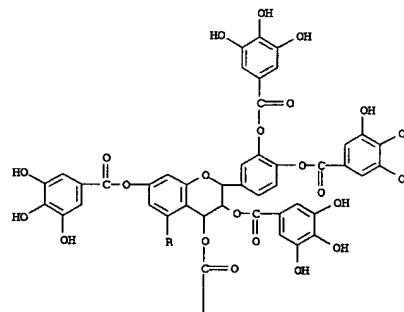
L3 ANSWER 67 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1973:506161 CAPLUS
 DOCUMENT NUMBER: 79:106161
 TITLE: Studies on the solvent extracts and purified extracts of babul (Acacia arabica)
 AUTHOR(S): Santhanam, P. S.
 CORPORATE SOURCE: Cent. Leather Res. Inst., Madras, India
 SOURCE: Leather Science (Madras) (1973), 20(4), 119-23
 CODEN: LESCA9; ISSN: 0023-9771
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB Removal of non-tannins from solvent exts. of babul bark increased the fixation and shrinkage temperature of the tanned leather. The reddish tinge in babul-tanned leather was due to the polymeric tannin components in babul exts., and leucocyanidin gallate [18696-42-9] was responsible for the good shrinkage temperature given by babul.
 IT 18696-42-9
 RI: USES (Uses) (in exts. from babul bark)
 RN 18696-42-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[3,4-bis[(3,4,5-trihydroxybenzoyl)oxy]phenyl]-3,4-dihydro-2H-1-benzopyran-3,4,5,7-tetraol ester (9CI) (CA INDEX NAME)

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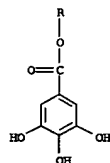
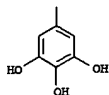
L3 ANSWER 68 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1968:411431 CAPLUS
 DOCUMENT NUMBER: 69:11431
 TITLE: Phenolic constituents of babul. III. Complexing of phenolic constituents of babul with chrome
 AUTHOR(S): Santhanam, P. S.; Nayudamma, Y.
 CORPORATE SOURCE: Cent. Leather Res. Inst., Madras, India
 SOURCE: Leather Science (Madras) (1968), 15(3), 73-5
 CODEN: LESCA9; ISSN: 0023-9771
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB A study was made of interaction between vegetable tannins and chrome by observing precipitation and light energy absorbance in the visible range.
 The following interactions were studied: chrome-babul, chrome-polymeric tan fractions T1 and T2, chrome-leucocyanidin gallate, chrome-catechol, and chrome-gallic acid. Precipitation was observed in all cases except in those of catechol and gallic acid. No characteristic spectrum of chrome was observed. This suggests that the chrome complex has been changed by vegetable tannins. The soluble complex formation is greatest in the case of gallic acid.
 IT 18696-42-9
 RI: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with chromium oxide (Cr2O3))
 RN 18696-42-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[3,4-bis[(3,4,5-trihydroxybenzoyl)oxy]phenyl]-3,4-dihydro-2H-1-benzopyran-3,4,5,7-tetraol ester (9CI) (CA INDEX NAME)

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L3 ANSWER 68 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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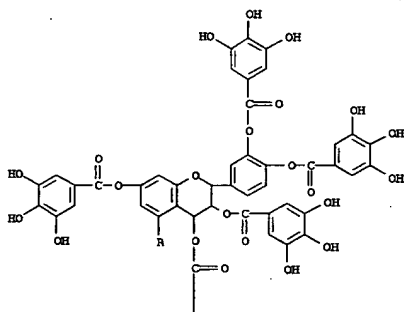


L3 ANSWER 69 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1968:14108 CAPLUS
 DOCUMENT NUMBER: 68:14108
 TITLE: Effect of certain constituents of vegetable tanning liquors on the structure of collagen
 AUTHOR(S): Mohanaradhakrishnan, V.; Ramanathan, Natesan
 CORPORATE SOURCE: Central Leather Res. Inst., Madras, India
 SOURCE: Leather Science (Madras) (1967), 14(10), 285-94
 CODEN: LESCA9; ISSN: 0023-9771
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB The effects of the individual components of vegetable tan liquors such as catechol (I), leucocyanidin gallate (II), gallic acid (III), ellagic acid (IV), chebulinic acid (V) and quercetin on collagen fibers were investigated by using electron microscopy, shrinkage temps., and the phys. properties of the fiber. Limed, delimed, and acetone-dehydrated kangaroo tail tendon collagen fibers along with small pieces of similarly processed goat pelts were used for the expts. The fibers were soaked overnight in a 0.5% solution of the above-mentioned components. The liquid/goods ratio was kept at 10:1, simulating the usual tannery practice. After the solvent tannage, the samples were washed with 3 changes of H₂O at pH 4.0 for about 10 min. Control fibers were treated in similar manner. The washed fibers were conditioned at 80°F. and 30% relative humidity then at the same temperature at 65 ± 4% relative humidity for 1 week. They were then investigated. The results showed that I and II increased the shrinkage temperature slightly, while III, IV, and V decreased it to a slight extent.
 The change in hydrothermal and mech. properties was explained by electron-microscope observations. The effect of the individual constituents was different than when they were present together.
 IT 18696-42-9
 RL: USES (Uses)
 (collagen mol. structure in relation to)
 RN 18696-42-9 CAPLUS
 CN Benzoic acid, 3,4,5-trihydroxy-, 2-[3,4-bis[(3,4,5-trihydroxybenzoyl)oxy]phenyl]-3,4-dihydro-2H-1-benzopyran-3,4,5,7-tetraol ester (SCI) (CA INDEX NAME)

L3 ANSWER 69 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

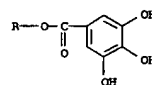
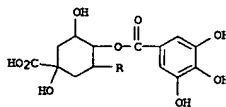
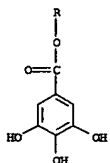
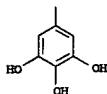
PAGE 1-A



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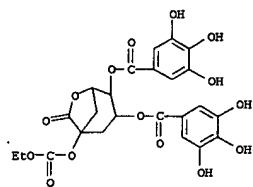
ACCESSION NUMBER: 1963:73058 CAPLUS
 DOCUMENT NUMBER: 58:73058
 ORIGINAL REFERENCE NO.: 58:12457f-g
 TITLE: Gallotannins. VIII. The preparation and properties of some galloyl esters of quinic acid
 AUTHOR(S): Haslam, E.; Haworth, R. D.; Lawton, D. A.
 CORPORATE SOURCE: Univ. Sheffield, UK
 SOURCE: Journal of the Chemical Society (1963) 2173-81
 CODEN: JCSOA9; ISSN: 0368-1769
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 ED Entered STN: 22 Apr 2001
 AB cf. CA 57, 15213. The four isomeric mono-O-galloylquinic acids have been synthesized and their properties described. The structure of the "core" of Tara gallotannin, as 3,4,5-tri-O-galloylquinic acid, has been confirmed by synthesis and the preparation of 4,5-O- and 1,3,4,5-tetra-O-galloylquinic acid is reported.
 IT 100164-98-5P, Gallic acid, 5-carboxy-3,5-dihydroxy-1,2-cyclohexylene ester 102289-18-9P, Gallic acid, 5-carboxy-3,5-dihydroxy-1,2-cyclohexylene ester, γ-lactone, Et carbonate 103369-47-7P, Gallic acid, 5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester 106505-31-1P, Gallic acid, tetraester with 1,3,4,5-tetrahydroxycyclohexanecarboxylic acid
 RL: PREP (Preparation)
 (preparation of)
 RN 100164-98-5 CAPLUS
 CN Gallic acid, 5-carboxy-3,5-dihydroxy-1,2-cyclohexylene ester (7CI) (CA INDEX NAME)

PAGE 2-A

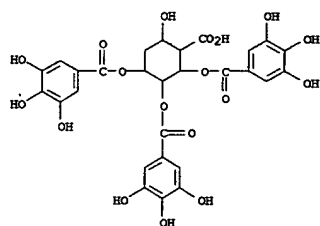


RN 102289-18-9 CAPLUS
 CN Gallic acid, 5-carboxy-3,5-dihydroxy-1,2-cyclohexylene ester, γ-lactone, ethyl carbonate (7CI) (CA INDEX NAME)

L3 ANSWER 70 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 103369-47-7 CAPLUS
 CN Gallic acid, 5-carboxy-5-hydroxy-1,2,3-cyclohexanetriyl ester (7CI) (CA INDEX NAME)



RN 106505-31-1 CAPLUS
 CN Gallic acid, tetraester with 1,3,4,5-tetrahydroxycyclohexanecarboxylic acid (7CI) (CA INDEX NAME)

L3 ANSWER 70 OF 70 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

